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ABSTRACT

The STINT Teacher Training Program is designed to provide crucial support for new and inexperienced teachers in urban schools using skilled and experienced teachers who are given 100 percent released time to work with the participants on a ratio of approximately one to nine. The program is concentrated in the ghetto areas of Manhattan, Brooklyn, and the Bronx. There are six major goals: 1) to provide a variety of supportive services; 2) to develop greater teacher competence; 3) to decrease staff turnover; 4) to help teachers develop a more effective methodology; 5) to provide an improved learning situation; and 6) to develop a more sensitive and high-developed response to urban ghetto classroom situations. Data collected from teachers in the program were compared with data from non-participants in similar situations. The results showed that on measures reflecting job satisfaction STINT teachers were clearly superior to their non-STINT counterparts. However, this superiority was not found on measures reflecting skill development. It was felt that one year did not give sufficient time to achieve both goals, and consequently further studies of both groups were recommended. The unpublished instruments used in the evaluation are included in the document. (MBM)

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AN EVALUATION OF THE PROGRAM "SUPPORTIVE TRAINING FOR INEXPERIENCED AND NEW TEACHERS" (STINT) IN NEW YORK CITY PUBLIC SCHOOLS, 1970

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Project Director

An evaluation of New York City School Districts education projects funded by the "New York State Urban Education Program" enacted at the 1968 legislative session of the New York State Legislature for the purpose of "meeting special educational needs associated with poverty" (Chapter 685, Section 9, subdivision 12, laws of 1968).

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EXECUTIVE SUMMARY

EVALUATION OF THE "STINT" TEACHER-TRAINING PROGRAM

Description of the STINT Program

The STINT Teacher-Training Program - now in its second year of operation - is designed to provide crucial support for new and inexperienced teachers in urban schools. This support is provided in the form of teacher-trainees: experienced and skilled teachers who are given 100% released time to serve as a constant and friendly resource to the STINT participants in a ratio of approximately one to nine. STINT is funded by the Office of Urban Education of the State of New York. It functions in twelve districts in New York City, and in all of the boroughs except Richmond. Although STINT operates in Queens, the target population of STINT is largely centered in the impacted ghetto areas of Manhattan, Brooklyn, and the Bronx. Funding for the past year was at approximately the two-and-a-quarter million dollar level, allocated directly to the several districts. Although the program is administered independently by the several districts, the evaluation is conducted centrally, under the auspices of the Bureau of Educational Research of the New York City schools.

Goals of the STINT program

The operational goals of the STINT Program used in this study were distilled from four sources: (1) The State Department of Education; (2) The Central Office of the Board of Education of New York City schools; (3) Directors of Office of Urban Education Programs of several of the districts in New York City; and (4) The principals and teacher-trainers in several of the participating schools. Basically, there appear to be six major goals:

1. To provide a variety of supportive services to new and inexperienced teachers.
2. To develop greater competence in new and inexperienced teachers.
3. To decrease staff turnover among the participants.
4. To help new and inexperienced teachers develop a more effective methodology.
5. To provide an improved learning situation for the students of the participating teachers.
6. To develop a more sensitive and highly-developed response to non-standard (i.e., impacted urban ghetto) classroom situations.

Study Design

The present study was designed to test the effectiveness of the STINT teacher-training program in terms of its major goals. Data were collected on several variables in which new and inexperienced teachers participating in the STINT program were compared to new and inexperienced teachers on the same grade levels teaching in nearly-identical situations who were not participating in STINT or other similar supportive programs (except for the programs that all new teachers in the New York City school system are compelled to participate in). The variables on which the STINT and non-STINT teachers were compared followed specifically from the goals listed above.

These were (in order of the goals):

1. Extent of implementation data, gathered in the form of questionnaires from the district Office of Urban Education program coordinators and the teacher-trainers.
2. Principals' evaluations of the professional growth and development of the new and inexperienced teachers in their schools (with STINT and non-STINT).
3. Data about teacher-turnover in STINT and non-STINT schools; specifically, resignations and transfers.
4. Structured, objective observational data about teachers' practices; specifically, information about patterns of teacher and pupil communication in the classroom.
5. Data about the rate of student absenteeism in STINT and non-STINT classes; and information about students' social adequacy in the classroom.
6. Measures of teacher attitudes and morale; and ratings of teachers' responses to stressful classroom situations typical of urban ghetto schools.

Findings

1. Generally speaking, both Office of Urban Education program coordinators in the several districts and the participating teacher-trainers felt that the program operated as had been expected, and were generally satisfied with the program as it was conducted this year. However, the program coordinators felt that improvement could be made in two basic areas:
   a. The majority of the program coordinators who responded to the questionnaire felt that there were not enough teacher-trainers to cover all of the teachers in the program adequately.

b. Most of the coordinators felt that experienced teachers should be included in this program, as well as the new and inexperienced teachers.

There were several interesting perceptions expressed by the teacher-trainers as well.

a. The teacher-trainers were nearly evenly split in their opnions about being able to see the teachers as often as they would have liked.

b. Most of the teacher-trainers would not have selected the participating teachers on a different basis than that used at the present time.

c. Most of the teacher-trainers noted that they did not encounter resistance from the teachers with one or more years experience who participated in the program.

d. Most of the teacher-trainers were satisfied with the number of teachers they were responsible for, although approximately 40% of them would have preferred to work with a smaller number of teachers (this corroborates the findings in "a" above.)

e. The majority of the teacher-trainers felt that they would not want to structure the program differently.

2. On most of the items in the questionnaire given principals to evaluate their new and inexperienced teachers, STINT principals rated their new and inexperienced teachers more positively than the non-STINT principals. However, the differences were extremely small and were not statistically significant.

3. Teacher turnover among the STINT sample was substantially less than among the non-STINT sample. Of the 47 teachers in the STINT group, only one left during the year (approximately 2%), whereas eight of the 49 teachers in the non-STINT group left before the end of the year (approximately 16%). In addition, in District #14 none of the approximately 180 STINT teachers resigned or requested transfers. However, complete teacher-turnover data were not available prior to the preparation of this report. These data will be collected early in the school year 1970-71, and will be included in a supplementary report.

4. Of the 10 observational measures which focused on teacher flexibility and openness of communication in the classroom, STINT teachers showed superiority on only one (the number of spontaneous, unsolicited student contributions performed).

5. Student attendance data were not available prior to the preparation of this report. These data will be collected early in the school year 1970-71 and will be included in a supplementary report.

On measures of students' social adequacy (sociometry), there was no difference between the STINT and non-STINT classes tested in terms of the number of children who were socially-isolated or rejected.

6. Contrary to expectation, STINT teachers did not verbalize more accepting and less punitive responses to stressful classroom situations than did their counterparts in the non-STINT classrooms. However, on measures of teacher morale, STINT teachers were shown to have consistently higher (i.e., more positive) scores than teachers in the non-STINT group.

Conclusion

It was evident that on measures reflecting job satisfaction, STINT teachers were clearly superior to their non-STINT counterparts. However, on measures reflecting skill development, this superiority did not hold up. It was felt that one year's time might not be a long enough period in which to achieve both goals. Consequently, further studies of both groups - at the end of the succeeding year - were recommended.

PREFACE AND ACKNOWLEDGMENTS

One of the most extensive of the district decentralized projects in New York City funded by the New York State Office of Urban Education (Quality Incentive Program) is entitled, "Supportive Training for New and Inexperienced Teachers" (STINT). An evaluation of the STINT program, conducted during the 1969-70 academic year, is presented in this report.

The Institute for Educational Development appreciates the cooperation of all who assisted in the conduct of the study: school administrators, district coordinators of the Quality Incentive Program, teacher-trainers in the STINT schools, and the STINT teachers themselves. Special appreciation is given the administrators and teachers of schools which were not directly involved in the STINT program who voluntarily participated in the evaluation. In addition, IED wishes to express its appreciation to Dr. Samuel D. McClelland, Acting Director of the Bureau of Educational Research of the New York City Schools for his help in providing liaison services between IED and the schools.

IED also wishes to acknowledge the professional services of Dr. Arnold Goldman of the Jefferson Community Mental Health Center in Philadelphia, Pennsylvania; of Dr. Charles Thornton, of the Northeast Community Mental Health Center in Philadelphia, Pennsylvania; and of Mr. Ronald Downey of the Temple University Testing Bureau in Philadelphia, Pennsylvania.

Finally, the Institute for Educational Development wishes to acknowledge Dr. Fred K. Honigman who served as project director for the evaluation and Mr. Glenn Miller who served as the project associate, for their careful and thorough management of the evaluation.

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INTRODUCTION

Description of the STINT Program

"STINT" is a teacher-training program funded by the Office of Urban Education of the State of New York to provide intensive support for new and inexperienced teachers in the difficult urban setting. This program--largely a product of the Office of Personnel of the New York City school system--is in the second year of funding. It operates in 12 of the districts within the system, and in all of the boroughs except Richmond. Although the program is represented in Queens, its target population is largely centered in the ghetto areas of Manhattan, Brooklyn, and the Bronx. Funding for the past year was at approximately the two-and-a-quarter million dollar level, allocated directly to the several districts. Although STINT is administered independently within each of the districts, the evaluation is conducted centrally, under the auspices of the Bureau of Educational Research of the New York City Board of Education.

In the participating schools, both new teachers and those identified by principals as needing help in becoming better acclimated to the urban instructional setting, participate in the program.

The STINT program is based on the awareness that the major teacher-training institutions provide little help to future teachers in preparing to deal with the realities of urban education. Data available on teacher-turnover during and at the end of the first year of teaching strongly suggest that these institutions have not only ill-prepared the new teacher to deal effectively with the urban child, but have created unrealistic expectations about conditions in the urban schools as well. Without direction and support, the new teacher in the urban setting is likely to be overwhelmed by the complexity of his task. The STINT program was designed to intervene in this process, and provide appropriate support and direction for the new and inexperienced teacher.

The support mechanism provided new and inexperienced teachers by STINT is a corps of specially-picked teacher-trainers, one for every nine new and inexperienced teachers in the program. These teacher-trainers are master teachers of proven ability who are on 100% released time and full salary to function in this capacity. The program capitalizes on their experience and expertise to provide a unique and friendly resource to the potentially-bewildered teacher. These teacher-trainers, working as peers with the new teachers, offer on-the-job immediate help, through encouragement, cooperative planning, informal discussions, assisting in lessons, and specific hints. In essence, they represent a source of visible and immediate help.

In a more formal sense, the teacher-trainers are responsible for a rather elaborate but highly personalized staff-development program, which includes orientation, field conferences, in-service workshops, demonstration lessons, and

observations. In these sessions, as well as in informal discussions, the new teacher and the teacher-trainer focus on classroom management practices, the use of a wide variety of instructional aids and materials, long- and short-range planning, setting up classroom programs, and the development of effective techniques and routines in general.*

In addition to the teacher-trainer, the program is rich in other resources. Specialists in the various subject areas - such as reading, science, math, social studies, music, art, etc. - are called in to provide guidance and substantive help. Specialists in the areas of guidance, health, and instructional materials are also made available, to acquaint new and inexperienced teachers with the nature of their services, and the availability of these resources in general. Field trips and video-tape facilities (for feedback purposes) are also frequently available to the new teacher.

In sum, STINT attempts to provide the practical training for teaching in urban schools that is generally overlooked by most teacher-training institutions. This is done largely through the continuous support and guidance of experienced master teachers, with the backup of a wide variety of specialists and materials.

Goals of the STINT Program

The operative goals of the STINT program used in this study were distilled from four sources:

1. The New York State Department of Education.
2. The Board of Education of the City of New York City Schools.
3. Coordinators of New York State Office of Urban Education Programs in several of the districts in New York City.
4. The principals and teacher-trainers in several of the participating schools.

Basically, there were six major goals for the program:

1. To provide a variety of supportive services to inexperienced and new teachers; and to provide the basis for initial success by giving on-the-job immediate help.
2. To develop greater competence in new and inexperienced teachers.
3. To decrease staff turnover among the participants.
4. To help new and inexperienced teachers develop a more effective methodology.

*The teacher-trainers themselves receive ongoing support and training. Staff development sessions are conducted by the Office of Personnel of the school system of the City of New York. In addition, structured materials are available to the teacher-trainers, including the *Manual for Teacher-Trainers* which was developed and produced with the support of the Office of Personnel.

5. To provide an improved learning situation for the students of the participating teachers.

6. To develop a more sensitive and highly-developed response to non-standard (i.e., urban ghetto) classroom situations.

Framework of the Evaluation

The purpose of the present study was to evaluate the STINT program with regard to each of the goals mentioned above. The measures selected were felt to provide the most complete information bearing on each of the goals.

To asses goal number one, data were gathered from STINT teacher-trainers and from program coordinators of Office of Urban Education programs in districts where STINT was being conducted, which sought their perception concerning the implementation of the program in the field. Because the number of program coordinators was too small to support tests of significance, no formal hypotheses were developed in relation to their expected reactions. These sections were reported in descriptive form.

The following hypotheses were developed in relation to the teacher-trainers' expected reactions to the program:

Hypothesis 1: Teacher-trainers in the STINT program are satisfied with the frequency with which they meet the teachers they supervise.

Hypothesis 2: Teacher-trainers in the STINT program are satisfied with the amount of time they spend with the teachers they supervise when they meet.

Hypothesis 3: Teacher-trainers in the STINT program feel that they participate in useful staff-development activities.

Hypothesis 4: Teacher-trainers in the STINT program are satisfied with the existing criteria for selecting the teachers participating in the program.

Hypothesis 5: Teacher-trainers in the STINT program do not feel that there is any resistence or resentment expressed by teachers in the program with at least one or more year's experience.

Hypothesis 6: Teacher-trainers in the STINT program are satisfied with the number of teachers with whom they work.

Hypothesis 7: Teacher-trainers in the STINT program are satisfied with the present structure of the program.

To assess goal number two, principals of selected STINT and non-STINT schools were asked to evaluate the professional growth of their new teachers. The following hypothesis was developed in relation to the principals' expected evaluations:

Hypothesis 8: Principals of schools participating in the STINT program rate the professional development of their new teachers more positively overall than do principals of schools not participating in the STINT program.

To assess goal number three, teacher-turnover data for STINT teachers participating in the evaluation were compared to that of the non-STINT teachers participating in the evaluation. The following hypothesis was developed in relation to the expected data on teacher-turnover in the two groups:

Hypothesis 9: Fewer of the STINT teachers participating in the evaluation resign or request transfers during the school year 1969-70 than do the non-STINT teachers participating in the evaluation.

To assess goal number four, live observational data were collected in the classes of participating STINT and non-STINT teachers. The following hypotheses were developed in relation to the expected data produced by the observations:

Hypothesis 10: STINT teachers participating in the evaluation lecture less often than do non-STINT teachers participating in the evaluation.

Hypothesis 11: STINT teachers participating in the evaluation lecture more briefly than do the non-STINT teachers participating in the evaluation.

Hypothesis 12: STINT teachers participating in the evaluation ask a relatively greater number of questions than do the non-STINT teachers participating in the evaluation.

Hypothesis 13: STINT teachers participating in the evaluation scold or severely criticize the entire class less often than do the non-STINT teachers participating in the evaluation.

Hypothesis 14: Students in STINT classes participating in the evaluation manifest a greater willingness to answer questions than do students in non-STINT classes participating in the evaluation.

Hypothesis 15: Students in STINT classes manifest a relatively greater amount of participation (in terms of the number of overall contributions given) than do students in non-STINT classes participating in the evaluation.

Hypothesis 16: Students in STINT classes perform a relatively greater number of spontaneous unsolicited contributions than do students in non-STINT classes participating in the evaluation.

Hypothesis 17: Students in STINT classes manifest a relatively greater amount of direct student-to-student interaction than do students in non-STINT classes participating in the evaluation.

Hypothesis 18: Students in STINT classes perform relatively fewer overt misbehaviors than do students in non-STINT classes participating in the evaluation.

Hypothesis 19: Students in STINT classes perform relatively briefer, less prolonged misbehaviors than do students in non-STINT classes participating in the evaluation.

To assess goal number five, two kinds of data were collected: (1) student attendance figures for the STINT and non-STINT classes participating in the evaluation; and (2) data about the frequency of social isolation in a small sub-sample of these classes. Because of the (necessarily) small number of classrooms involved in the collection of social isolation data, these data were reported in descriptive form only, and no formal hypotheses were developed. The following hypothesis was developed in relation to the expected student attendance data for both groups:

Hypothesis 20: Students in STINT classes participating in the evaluation show a higher percentage-of-attendance for the school year 1969-70 than do students in the non-STINT classes participating in the evaluation.

To assess goal number six, data were gathered about the attitudes and morale of the STINT and non-STINT teachers participating in the study, as well as the nature of their (verbalized) reactions to stressful classroom situations.

The following hypotheses were developed in relation to the assessment of teachers' attitudes:

Hypothesis 21: STINT teachers participating in the evaluation indicate greater satisfaction with teaching than do the non-STINT teachers participating in the evaluation.

Hypothesis 22: STINT teachers participating in the evaluation manifest more positive attitudes about their colleagues than do non-STINT teachers participating in the evaluation.

Hypothesis 23: STINT teachers participating in the evaluation feel more capable of handling their teacher load than do non-STINT teachers participating in the evaluation.

Hypothesis 24: STINT teachers participating in the evaluation feel more positive about facilities and services in their schools than do non-STINT teachers participating in the evaluation.

Hypothesis 25: STINT teachers participating in the evaluation manifest more positive attitudes overall in relation to their teaching than do non-STINT teachers participating in the evaluation.

The following hypothesis was developed in relation to the data gathered about teachers' (verbalized) reactions to stressful classroom situations.

Hypothesis 26: STINT teachers participating in the evaluation verbalize typically more accepting and less punitive reactions to stressful classroom situations than do non-STINT teachers participating in the evaluation.

PROCEDURES

Population

The selection of the STINT and non-STINT groups was felt to be one of the most critical procedures in the entire study. In order to obtain valid results it was important to keep the teaching situations for the STINT and non-STINT teachers as similar as possible. Since differences in this area would strongly affect the issues on which the comparisons were to be made (i.e., performance, etc.), every possible step was taken in the selection of the STINT and non-STINT groups to insure that the teaching situations for the two groups were as identical as possible, within the normal limits of field research.

To fulfill this requirement, the participating STINT and non-STINT schools were selected as carefully matched pairs, based on population density, close geographic proximity, and similarity of the racial and ethnic distribution of the student populations of each pair. Once the selection of paired schools was made, the participating teachers were selected in a way that permitted the STINT and non-STINT groups to have similar qualifications and backgrounds in terms of the length of their teaching experience and grade level taught. A basic guideline adopted for the matching procedure was that all potential pairs of STINT and non-STINT schools must be within walking distance of one another, so that they drew their children from roughly the same neighborhood; and that they be classified as Title I poverty schools (as the program was basically designed for new and inexperienced teachers in the ghetto areas).

Chronologically, the first step was the screening-out of all potential STINT and non-STINT schools that were not classified as Title I poverty schools. This step eliminated many potential pairs of STINT and non-STINT schools, including all those in the borough of Queens.

Secondly, careful scrutiny was given the geographic distance between any two schools that might consitute a possible STINT/non-STINT pair. Any potential pair of schools that were not within walking distance of one another (i.e., four to five blocks, maximum) were dropped. It was felt that if pairs of STINT and non-STINT schools drew children from approximately the same neighborhood, there would be reasonable certainty that the children were from similar socio-economic backgrounds. A more careful screening of potential pairs based on the distribution of the racial and ethnic characteristics of the children in the schools was performed later.

Schools not having similar population densities were deleted as potential pairs. The population density of the schools was felt to be an important factor in the sense that overcrowded schools are charged with producing tense and difficult teaching situations, along with numerous other problems. It was clear that a systematic

difference between the STINT and non-STINT groups in this respect would severely affect teachers' performance on the variables examined in the present study.

Potential pairs of schools were then screened in terms of the similarity between them in the distribution of the racial and ethnic characteristics of their student populations. The obvious factors of language problems and culture-clash were felt to affect materially the measures examined in the study. Consequently, only those pairs of schools were permitted to remain in the sample in which the distributions of black, Puerto Rican, and white students in both schools were very similar.

Once carefully-matched pairs of STINT and non-STINT schools were selected, teachers within each particular pair of schools were grouped in terms of the length of their teaching experience and grade-level taught (primary or intermediate*). Within these groupings, a random selection was made to yield relatively equal n's for both groups in each category (i.e., length of teaching experience and grade-level taught*).

Although the STINT program operated in twelve districts in the City of New York, only seven pairs of STINT and non-STINT schools met the above qualifications. Fifty teachers were originally selected for each group. Tables showing the racial and ethnic composition of the pairs of STINT and non-STINT schools, and the distribution of STINT and non-STINT teachers in terms of length of teaching experience and grade-level taught, are contained in the Appendix.

Design

Goal Number One - To provide a variety of supportive services to new and inexperienced teachers.

To determine the extent to which the intended supportive services were actually provided to the teacher in the field, separate questionnaires were developed for the coordinators of Office of Urban Education Programs (who have the responsibility of managing the STINT programs in the different districts) and the teacher-trainers. These questionnaires sought three kinds of data from each group:

1. Information about their satisfaction with different elements of the program.
2. Structured, objective data about various elements of the program that did not relate to "satisfaction."

*Treated as a dichotomy between primary (grades 1-3) and intermediate (grades 4-6).

3. Commentary, perceptions, and opinions not specifically reflecting their satisfaction with the program.

In the questionnaire administered to the program coordinators, items number 1, 2, 3, 4, 5, 6, 7 and 8 reflected on issues dealing with satisfaction with the program, item 9 dealt with descriptive data about their experience in the program, and item 10 asked the program coordinators to comment in an open-ended way about the conduct of the program.

There were ten items in the program coordinator questionnaire. The first eight were answerable in terms of "yes" or "no" responses. Item 9 was answerable in terms of a simple selection ("new teachers only or experienced teachers as well"). Item 8 permitted an optional written response in addition to "yes" or "no". Item 10 solicited only an opitional written response.

In the questionnaire administered to teacher trainers, items 1, 2, 3, 4, 8, 9, and 11 reflected on their satisfaction with the program; items 5, 6, 7, and 10 dealt with descriptive data about their experience in the program; and item 12 asked them to comment in an open-ended way on the conduct of the program.

Items 1, 2, 3, 4, 7, 8, 10, and 11 were answerable in terms of "yes" or "no". Item 9 asked teacher-trainers to answer in terms of "same," "larger," or "smaller." Items 5 and 6 requested percentages ("what proportion of time . . . . "). Item 9 called for an optional written response as well as "yes" or "no." Item 10 called for an optional written response only.

The questionnaires were distributed to all program coordinators and teacher-trainers in person approximately two weeks before the end of the school year and were to be mailed back.

Because of the small number of program coordinators (12), the program coordinator data were reported in descriptive form only, and no statistical tests were applied.

Each item on the teacher-trainer questionnaire was subjected to a chi-square analysis, to determine whether a significantly greater number of teacher-trainers responded positively than negatively to that item.

Goal Number Two - To develop greater competence in new and inexperienced teachers.

To assess new teachers' competence, a questionnaire was developed that solicited principals' evaluations of the professional growth and development of the new and

inexperienced teachers in their schools. The questionnaire consisted of ten items, on which principals were asked to rate their new teachers on a five-point scale. Ratings on all items ran from "poor" (1) to "excellent" (5). The questionnaire was mailed to the principals of the seven STINT and seven non-STINT schools.

A mean was computed for each group across all items. If the STINT group mean were greater than the non-STINT group mean, a correlated t-test was applied, to test the significance of the difference.

Goal Number Three - To decrease staff turnover among the participants.

Inasmuch as there is a one year lag for acquiring normative data about teacher-turnover in the New York City school system, it was felt that a comparison could be made using the STINT and non-STINT teachers participating in the study. These data were sought at the conclusion of the school year.

Goal Number Four - To help new and inexperienced teachers develop a more effective methodology.

To examine changes in teacher methodology, it was felt that direct classroom observation would be the most appropriate means of providing specific information about changes in the actual patterns of teacher and pupil behavior in the classrooms. The instrument selected for use in the present study was the Multidimensional Analysis of Classroom Interaction (MACI).

MACI is an instrument for coding and quantifying teacher and pupil behaviors in the classroom, and is one of the group of instruments generally classified under the heading "interaction analysis."

The MACI data-collection technique is based on a group of categories for classifying teacher and pupil behavior. The categories are supplemented by sub-categories, and highly-specialized coding procedures called "recording conventions." MACI data are gathered by a trained observer who records classroom happenings by writing down the symbol of the category that represent the behavior or event he is witnessing as it occurs. When the behavior or event changes, the observer records the appropriate new category symbol. If the behavior or events lasts for more than three seconds, the observer repeats the symbol for that category and continues to do this for every additional three seconds that the behavior or event lasts. The typical observation period in a classroom lasts thirty to forty minutes. The data recorded by the observer are keypunched, and then organized and analyzed by a computer.

The output provides basically three kinds of data about teacher and pupil behaviors. The first of these is information about the frequency with which a specific category or group of categories occurs. Information about the frequency of occurrence of a specific category or group of categories is almost always related to a more general grouping of categories (e.g., the total of all teacher behaviors performed, the total of all student behaviors, the grand total of all recorded data, etc.) and are expressed as a proportion. For example, the question, "What proportion of teacher behavior is accounted for by lecturing and information giving," is answered by examining the ratio L/TB: the number of times that category "L" - Lecturing and Information-giving - was recorded during the observation, divided by the total of all teacher behaviors recorded (the "more general grouping" referred to above). The second kind of information provided by analysis of the MACI data is the "typical length of performance" figure for each category of behavior. This figure is acquired by dividing the total of all of the special "prolonged performance" notations for each category (i.e., performed for longer than three seconds) by the number of times that this particular category of behavior was performed during the observation period. For example, to acquire information about the "typical length of performance" of a teacher's lecturing in a classroom, the total number of "prolonged performance" notations recorded for category "L" would be divided by the number of times that category "L" occured in the observation. This figure is labelled "RCF_L" ("Ratio to Category Frequency" for category "L"). The higher this figure, the longer the typical length of lecture in the classroom.

The third kind of data available deals with the sequences of behavior performed during the observation period. From these data it is possible to determine the number of times that a particular sequence of behaviors or events occurred. Using this technique, it is possible to determine the number of student-to-student interactions that occurred. Like the other kinds of MACI measures, the sequences are usually related to some more "general" grouping. For example, the number of student-to-student interactions, discussed above, is usually seen as the ratio:

$$\frac{\text{Number of student-to-student interactions}}{\text{Total amount of student behavior performed}}$$

To obtain observational data in the present study, each of the STINT and non-STINT teachers were observed twice by a MACI observer. The data from the two observations for each teacher were pooled, and means were computed for the STINT and non-STINT groups on several measures. These measures were selected on the basis of their ability to communicate a broad spectrum of information about the nature of the communication patterns in the classrooms observed. These measures were:

1. $\frac{L}{TB}$ The proportion of all teacher behaviors accounted for by lecturing and information-giving.

2. RCF_L The typical length of the teacher's lecturing and information-giving behaviors.

3. $\frac{d+e}{TB}$ The proportion of all teacher behaviors accounted for by the teacher's asking questions.

4. $\frac{bbT}{TB}$ The proportion of all teacher behaviors accounted by for the teacher's punishing or criticizing the entire class.

5. Number of responses per solicitation. A ratio of the number of responses given by students to the number of questions asked by the teacher during the observation period.

6. $\frac{SB}{SB+TB}$ The proportion of all behaviors performed in the classroom accounted for by student behaviors.

7. $\frac{X}{SB}$ The proportion of all student behaviors accounted for by spontaneous (unsolicited) student contributions.

8. Student-to-student interaction. The proportion of all student behavior accounted for by direct student-to-student communication.

9. $\frac{3}{GT}$ The proportion of all recorded data accounted for by student's misbehavior.

10. RCF_3 The typical length of students' misbehavior.

On each measure, a mean was computed for all teachers in the STINT and non-STINT groups. The means for each group on each measure were inspected to determine whether they lay in the expected direction. On those measures in which the means lay in the expected direction, t-tests were applied, to test the significance of the differences.

Goal Number Five - To provide an improved learning situation for the students of the participating teachers.

It was felt that a reduction in student absenteeism would constitute a clear measure of an improved learning situation in the classroom. Thus, by comparing the rates of absenteeism in STINT and non-STINT classes, inferences could be made about the attractiveness of the classroom to the students. Consequently, data were sought from the appropriate offices of the New York City Board of Education at the termination of the school year.

It was felt that another way of measuring the adequacy of the learning situation was to assess students' social competence in the classroom. A review of the litera-

ture revealed little in the way of instrumentation to quantify social phenomena in the classroom. The only existing instrumentation applicable to the elementary grade levels for quantifying social phenomenon in the classroom without creating a major intrusion (which would not be tolerated by either the teachers or their principals) was the sociometric device identified by Amidon and Hoffman (1961). The sociometric device is aimed at identifying what Amidon and Hoffman termed "social isolates" in the classroom. Social isolates are defined as children who are not selected by any other children, either as workmates, as playmates, or as seatmates. The sociometric instrument is quite easy to administer. Students are simply requested to list a specific number of students they would like to sit with, play with, or work with. The number of selections they are asked to make is contingent on the number of children in the classroom. Inasmuch as the typical New York City classroom contains approximately 30 children, it was felt that four choices in each of the three categories would be appropriate. Consequently, children were asked to select (and rank from "first best" to "fourth best") the four children they would most like to sit next to, work with, or play with. They were permitted to select another student in more than one of the categories (although not more than once within any of the three categories). Four classrooms from the STINT and non-STINT groups were selected to receive this instrument. Inasmuch as the individual child represented the experimental unit, n equaled the total number of children in this sub-study in each of the STINT and non-STINT groups.

Because administration of the sociometric instrument necessitated an interruption of regular classroom activities, only four classes from each of the STINT and non-STINT groups were tested. Because the number of classes examined was so small, data were reported in descriptive form only, and no statistical tests were applied.

Goal Number Six - To develop a more sensitive and highly developed response to non-standard (i.e., urban ghetto) classroom situations.

To quantify this goal, it was felt that two kinds of data would be useful: (1) data reflecting teachers, attitudes about their jobs, and the total professional setting in which they worked; and (2) data about teachers' ability to deal constructively with stressful classroom situations that are characteristic of urban ghetto schools. The instrument selected to quantify teacher attitudes was the Purdue Teacher Opinionaire. This instrument appeared to be the most highly-structured, the most conceptually sound, and the most carefully-documented instrument of its kind at the present time. In addition to providing an overall score of teachers' attitudes or morale, the Purdue Teacher Opinionaire provided separate scores on ten factors, many of which had important bearing on the issues examined in the STINT program. It was felt, that, in particular, five factors were highly relevant to the issues being examined here. These were:

1. Satisfaction with teaching
2. Rapport among teachers
3. Teacher load
4. School facilities and services
5. A total measure of teacher attitude or morale

There were 100 items in the Purdue Teacher Opinionaire, each one having a specific bearing on one of the ten factors examined by the instrument. Teachers responded to each item in terms of "agree," "partially agree," "partially disagree," and "disagree." A mean was computed for each group on each of the five factors examined in this study. On those factors on which the STINT group mean was greater than the non-STINT group mean, t-tests were applied, to test the significance of the differences.

The assessment of teachers' responses to stressful classrooms situations was complicated by the lack of well-documented, standardized instruments, such as those available in other areas of measurement (e.g., achievement, teacher attitudes, etc.). One instrument of promise, however, was that developed by Dr. Anne Edelmann at Temple University, and used by her and her associates over the past few years to gauge teachers' responses to stressful situations. Of the total number of items presented by Edelmann, 16 were selected for use in the STINT evaluation.

The resulting questionnaire was designed to measure teachers' characteristic mode of response to "real life" classroom problems. Each item was represented as an incomplete story in which a potentially anxiety-arousing or provocative classroom event was portrayed. The teachers' task was simply to complete or finish each story by indicating what she herself would do under the circumstances.

Each item was rated according to whether the teachers' response was primarily to maximize the importance of the event and/or to reject and chastise; (2) minimize the event or respond non-evaluatively; or (3) utilize the event to benefit the students, such as incorporating the events into the ongoing lesson. Presumably, the more inclined the teacher was to resolve the event in a negative fashion, i.e., through punishment, the lower was the score. Conversely, the more the teacher resolved the situation by utilizing it in some way, the higher was the score. A rating manual was prepared to provide judges with concrete definitions of the rating points for each item, along with hypothetical examples for each item situation.

A total of three judges representing a broad spectrum of disciplines (a clinical psychologist, an educational psychologist, and a research psychologist) performed the ratings without knowledge of which protocols were from STINT or from non-STINT teachers. Judges' ratings were pooled, and a mean was computed for each group for all teachers in that group, across all items. If the STINT group mean was greater than the non-STINT group mean, a t-test was applied to test the significance of the difference.

FINDINGS

I. FINDINGS BEARING ON GOAL NUMBER ONE

Goal Number One - To provide a variety of supportive services to new and inexperienced teachers.

The Program Coordinator Questionnaire

Of the 12 district Office of Urban Education program coordinators responsible for managing the STINT Programs, only 5 responded to the questionnaire designed to solicit their perceptions of the program.

As shown in Table I, 5 of the 8 items reflected satisfaction with the program. It is evident from Table I that all of the program coordinators were satisfied that the program was funded adequately (item 1), that the criteria set forth for selecting participating teachers was appropriate (item 2), that the teacher-trainers were satisfactory (item 5); that the teacher-trainers saw the participating teachers often enough (item 6); and that the teacher-trainers spent enough time with the teachers when they did get to see them (item 7). On the other hand, the coordinators were dissatisfied with the coverage of the program within their districts (item 4), and would have recommended changes in the structure of the program (item 8). The program coordinators were largely split on the issue of whether there were enough teacher-trainers to do an adequate job (item 3).

Items 9 and 10 differed from those above in that they elicited program coordinators' responses to issues other than satisfaction with the program per se. On item 9, which asked whether the coordinators felt - based on this year's experience - that the program should be geared toward new teachers only or include relatively "experienced" reachers as well (i.e., one to three years' experience), only one of the five urban education coordinators indicated that the program should follow-up on the new teachers from the previous year, another felt that there should be continued assistance to "weak" teachers, another felt that experienced teachers who request help should be included, while another coordinator felt that all three categories of teachers (new, relatively inexperienced, and relatively experienced) should be included. On item 10, which asked urban education coordinators whether there were any issues that they would like to have discussed or commented about that did not appear in the questionnaire, two of the coordinators did not respond. One of the coordinators remarked that the program had gained favorable acceptance by all parties involved, ranging from the district superintendent to the parents of the children in the STINT classes. Another raised the issue of the time-tables for funding, suggesting that funding decisions were made too late in the year to allow adequate time to provide systematic and coordinated implementation of a good STINT program. Another coordinator complained about red-tape and problems with supplies.

TABLE I

RESPONSES OF PROGRAM COORDINATORS TO QUESTIONNAIRE ITEMS REFLECTING SATISFACTION OR DISSATISFACTION WITH THE EXISTING (STINT) PROGRAM

Item	Response Indicating Satisfaction with Program	Number of Satisfied Responses	Number of Dissatisfied Responses
1	Yes	5	0
2	Yes	5	0
3	Yes	2	3
4	No	0	5
5	Yes	5	0
6	Yes	5	0
7	Yes	5	0
8	Yes	5	0

The Teacher-Trainer Questionnaire

One hundred twenty-five (125) teacher-trainers responded to the questionnaire that was designed to elicit their perceptions about several aspects of the program. The largest grouping of items in the questionnaire were those dealing with satisfaction with the program. Those items on the questionnaire that dealt with satisfaction with the program, and the percentage of teacher-trainers responding positively, negatively, and not responding to each of these items is shown in Table II. For each item, the number of teacher-trainers responding positively was compared to the number of teachers-trainers responding negatively, in order to determine whether further analysis was justified. On every item dealing with satisfaction with the program, a greater number of teacher-trainers responded positively, and a chi-square analysis was performed.

A chi-square analysis of item 1 revealed that there was not a significantly greater number of teacher-trainers that felt that they saw the teachers they worked with as often as they would have liked (hypothesis 1). However, a (highly) significant number of teacher-trainers felt that they did have enough time with the teachers when they got together with them (item 2), that they did participate in useful staff-development activities (item 3), that they would have used the existing criteria for selecting the participating teachers if they had their choice (item 4), and that they did not encounter resistance or resentment among the teachers with at least one or more years' experience (item 8). (Hypotheses 2, 3, 4, and 5.) A greater number of teacher-trainers felt that the number of teachers that they worked with was satisfactory (item 9), and that they would not have wanted the program to have been structured any differently (item 10), although the level of significance of these differences was not as strong ($p=.06$ and $.07$, respectively) as in the items immediately above (hypotheses 6 and 7).

In constrast to the above "satisfaction" items, items 5 and 6 on the questionnaire were basically time-accounting items. Table IV shows the proportion of teacher-trainers' time that was spent in private consultation with teachers (item 5). From these data, it is clear that a majority of teacher-trainers spent less than 50% of their on-job time in private consultation with their supervisees (i.e., participating STINT teachers).

Table V shows the proportion of teacher-trainers' time that was spent in an "active" capacity (item 6). From these data, a multi-modal pattern is evident: teacher-trainers tended to spend either exactly half of their time in the classroom in an "active" capacity, or more than 75% of their time in the classroom in an "active" capacity. In fact, approximately 22.3% of all teacher-trainers responding to this item indicated that they spent 100% of their in-classroom time in an "active" capacity. Less than 15% of all teacher-trainers spent less than 50% of their in-classroom time in an "active" capacity.

TABLE II

PERCENTAGE OF 125 TEACHER-TRAINERS RESPONDING POSITIVELY, RESPONDING NEGATIVELY, AND NOT RESPONDING TO QUESTIONNAIRE ITEMS THAT REFLECT SATISFACTION WITH THE (STINT) PROGRAM

Item	Response Indicating Satisfaction With Program	Percentage Responding Positively	Percentage Responding Negatively	Percentage Not Responding
1	Yes	53.6	46.4	0.0
2	Yes	74.4	25.6	0.0
3	Yes	92.0	5.6	2.4
4	No	80.0	19.2	0.8
8	No	66.4	22.4	11.2
9	Same	57.6	40.8	1.6
11	No	52.8	37.6	9.6

Note—The selection of "same" on item 9 was interpreted as a positive (satisfaction) response, while the selection of "larger" or "smaller" was interpreted as a negative (non-satisfaction) response to that item.

TABLE III

CHI-SQUARE ANALYSIS: POSITIVE vs. NEGATIVE RESPONSES OF TEACHER-TRAINERS TO EACH QUESTIONNAIRE ITEM REFLECTING SATISFACTION WITH THE (STINT) PROGRAM

Item	Number of Teacher-Trainees Responding Positively to Item	Number of Teacher-Trainees Responding Negatively to Item	χ^2	p
1	67	58	0.6480	N.S.
2	93	32	29.7680	$<.001$
3	115	7	95.6065	$<.001$
4	100	24	46.5806	$<.001$
8	83	28	27.2522	$<.001$
9	72	51	3.5853	$\doteq.06$
11	66	47	3.1946	$\doteq.07$

TABLE IV

PROPORTION OF EACH DAY'S TIME SPENT BY STINT TEACHER-TRAINERS IN PRIVATE CONSULTATION WITH THEIR SUPERVISEES

Proportion of Time Spent in Consultation	Percentage of Teacher-Trainers Responding
Less than 50%	56.4
50%	30.0
More than 50%	13.6

TABLE V

PROPORTION OF TIME IN THE CLASSROOM
SPENT BY STINT TEACHER-TRAINERS
IN AN "ACTIVE" CAPACITY

Proportion of Time Spent in an "Active" Capacity	Percentage of Teacher-Trainers Responding
Less than 50%	14.9
50%	29.8
More than 50%, but less than 75%	13.8
75% or more	41.5

Although items 7 and 10 solicited teacher-trainers' perceptions of the program, they did not specifically seek information about their satisfaction with the program per se. Item 7 sought teacher-trainers' opinions about whether the first-year teachers benefitted more from the program than those with at least one or more years' experience. On this item, 96 teacher-trainers indicated that they felt that this was the case, 26 felt that it was not, and 3 did not respond at all. Item 10 asked teacher-trainers if they felt that the structure of the program differed in any significant way from the original plans for STINT in their districts. Although 34 of them indicated that it did differ from the original plans, the majority (80) felt that it did not, while 11 apparently had no opinion on this issue.

Item 12 differed from all of the above groupings in the sense that it was completely open-ended. On this item, teacher-trainers were asked whether there were any issues that they would like to discuss or comment upon that did not appear elsewhere in the questionnaire. Approximately 50 of the 125 teacher-trainers who returned their questionnaires responded to this item. Their responses were highly structured, and covered the program in an exhaustive manner. Their recommendations suggested five major groupings: (1) audio-visual aids and learning materials; (2) paraprofessionals; (3) further definition of the role of teacher-trainers; (4) the professional development of the teacher-trainers; and (5) recommendations relating to the general conduct of the STINT program.

In the first grouping (audio-visual aids), nine of the teacher-trainers indicated the need for more equipment, such as a videotape recorder, materials, books, movies, etc. Also in the area of material support, six of the teacher-trainers requested that space in the school be allocated specifically for use by the teacher-trainers.

Under the second grouping (paraprofessionals), it was suggested that paraprofessionals should handle the clerical work involved in the program, and that the training of the paraprofessionals should be improved.

In the third grouping (definition of the teacher-trainer role), the issue mentioned most frequently was that of formalizing the position of teacher-trainer; i.e., that it be formally recognized as a licensed supervisory position in the New York City schools system. There was also the feeling of a strong need to develop formal guidelines for teacher-trainers' duties and professional responsibilities. Teacher-trainers also expressed the feeling that they should be involved with only one basic job (supervision), and receive no additional administrative responsibilities. Teacher-trainers also requested advance notification of program recycling and/or expansion. Considerable concern was also expressed about the confidentiality of their communication with their supervisees.

The next major grouping (professional development of teacher-trainers) received the heaviest emphasis in terms of the number of respondents dealing with any single issue. Nine of the teacher-trainers felt that regularly scheduled meetings with other teacher-trainers should be structured into the program. Nine teacher-trainers also felt that scheduled time for staff development activities and conferences be structured into the program. Moreover, it was felt that local teacher-training institutions should be used as resources in the program. There was also interest expressed in a teacher-trainer newsletter.

The last major grouping of comments and recommendations were those dealing with the general conduct of the program. It was felt that the ratio of teachers to teacher-trainers should be reduced from nine-to-one to eight-to-one. It was also expressed that participation in STINT should be mandatory for teachers that have the minimum number (12) of education credits, although teachers with student-teaching should not be required to participate. It was felt that teachers should remain in the program for two years, and that experienced teachers should also be incorporated into the program. There was interest in having a formal evaluation of the trainees' progress and professional growth.

A comparison of the teacher-trainers and the program coordinators, reveals several equivalent items dealing with program satisfaction. Inspection of the responses given by program coordinators and teacher trainers shows interesting patterns of similarities and differences in their perceptions of the program.

The teacher-trainers and program coordinators responded similarly on items having to do with the selection of participating teachers in the program (positively) and the amount of time that teacher-trainers spent with the participating teachers when they got together (positively). Their perceptions were somewhat similar in terms of the frequency with which the teacher-trainers got to see the participating teachers: the program coordinator's responses were uniformly positive, while only a slight majority of the teacher-trainers' responses were more positive. On the issue of whether there were enough teacher-trainers to provide adequate coverage for all of the participating teachers, the program coordinators and teacher-trainers were somewhat divided in their opinions. Three of the five program coordinators felt that there were not enough teacher-trainers to handle the job. Although the majority of the teacher-trainers felt that the ratio of participating STINT teachers to teacher-trainers was adequate, a sizable minority would have preferred a smaller ratio of teachers to teacher-trainers. There was greater disagreement between the two groups in terms of how they perceived the appropriateness of the program for experienced teachers. Four of the five coordinators felt that the program would be beneficial for experienced teachers (i.e., that they should be included in the program), whereas 96 of the 125 teacher-trainers responding felt that the program was more beneficial for new teachers than experienced teachers (i.e., those with one or more years experience).

TABLE VI

MEANS OF STINT AND NON-STINT PRINCIPALS' RATINGS OF NEW TEACHERS IN THEIR SCHOOLS FOR EACH QUESTIONAIRE ITEM

Item	Mean STINT Principals' Ratings For This Item	Mean Non-STINT Principals' Ratings For This Item
1	3.29	3.00
2	3.57	3.43
3	3.29	3.29
4	2.86	2.86
5	2.71	2.57
6	3.57	3.29
7	2.29	3.14
8	3.14	2.71
9	3.29	3.71
10	2.50	2.57
Mean	3.03	2.96

Note—Higher score denotes more positive rating.

In terms of the questionnaire items dealing with the teacher-trainers' use of time (items 5 and 6), it is clear that teacher-trainers tended to spend at least half of their day involved in things other than conferences with their supervisees (Table IV). Table V shows that when teacher-trainers were in the classroom, more than 85% of them spent at least 50% of their time in an active capacity, such as teaching a demonstration lesson (in contrast to observing). The data from these two items suggest a relatively "active" role for the teacher-trainers in the STINT program.

II. FINDINGS BEARING ON GOAL NUMBER TWO

Goal Number Two - To develop greater competence in new and inexperienced teachers.

Principal Questionnaire

Principals of all 14 of the STINT and non-STINT schools participating in the study responded to the questionnaire seeking their ratings of their new teachers' professional competence. Table VI shows the means of principals' ratings of their new teachers on each item in the questionnaire. The data reveal that the STINT principals rated their teachers more positively than did the non-STINT principals. A correlated t-test was applied to the means of the two groups to test the significance of the difference between them. The value of t obtained was 0.76, which was not significant (hypothesis 8).

III. FINDINGS BEARING ON GOAL NUMBER THREE

Goal Number Three - To decrease staff turnover among the participants.

Teacher-Turnover Data

Complete teacher turnover data about STINT and non-STINT teachers in the sample were not available from the appropriate offices from the New York City Board of Education prior to the preparation of this report. Consequently, these data will be reported in a supplement to the project report, as soon as they are made available, at the beginning of the school year 1970-71. However, partial data were collected which showed a consistent pattern. Of the 48 teachers in the original STINT sample, only one left during the school year (approximately 2%). Of the 49 teachers in the original non-STINT sample, 8 left during the school year (approximately 16%). Corroborative data were gathered in District 14, in which none of the approximately 180 STINT teachers resigned or requested transfers during the school year 1969-70.

IV. FINDINGS BEARING ON GOAL NUMBER FOUR

Goal Number Four - To help new and inexperienced teachers develop a more effective methodology.

Observational Data

The means of the STINT and non-STINT groups on each of the observational measures were inspected to determine whether they lay in the expected direction. Table VII shows the direction of the differences between the means of the two groups on each measure, in relation to the direction predicted for that measure. On five of the ten measures, the differences between the means lay in the direction contrary to that expected and no further analysis was performed. On the five measures in which the differences between the means lay in the expected direction, the data were subjected to a t-test. Table VIII shows the results of the t-tests applied to the five measures in which the means of the two groups lay in the expected direction. The differences in the means between the two groups for the first three measures (RCF_L, $\frac{bbT'}{TB}$, and number of responses per solication) were not shown to be significant. On the fourth measure, however, the means of the two groups were shown to be significantly different beyond the .05 level. The value of t for the fifth measure (student-to-student interaction) was shown to approach (but not meet) significance at the .05 level. Thus, of all of the hypotheses bearing on the observational data related to goal number 4 (i.e., hypotheses 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19), only hypothesis 16 (that students in the STINT classes perform a relatively greater number of spontaneous, unsolicited contributions than do students in the non-STINT classes) was accepted ($p < .05$).

V. FINDINGS BEARING ON GOAL NUMBER FIVE

Goal Number Five - To provide an improved learning situation for the students of participating teachers.

Two kinds of data were collected in relation to this goal: (1) data about student absenteeism in the STINT and non-STINT groups during the school year, 1969-70; and (2) data about the adequacy of students' social functioning (i.e., the absence of severe social isolation) in the STINT and non-STINT groups.

Student Attendance Data

Data about the rate of student absenteeism were not available from the appropriate office in the New York City Board of Education, prior to the preparation of this report. Subsequently, these data will be reported in a supplement to the project, reported when they are available at the beginning of the school year, 1970-71.

TABLE VII

DIRECTION OF THE DIFFERENCES BETWEEN MEANS OF STINT AND NON-STINT GROUPS ON OBSERVATIONAL MEASURES REFLECTING CLASSROOM TEACHING PRACTICES

Measure	STINT Group Mean	Non-STINT Group Mean	Obtained Direction of Difference*	Expected Direction of Difference*	Further Analysis Required
L/TB	.1260	.1252	+	−	No
RCF_L	1.3959	1.4029	−	−	Yes
D+E/TB	.3199	.3397	−	+	No
BBT/TB	.1853	.2162	−	−	Yes
# Responses per Solicitation	1.1482	1.1022	+	+	Yes
SB/SB+TB	.3100	.3113	−	+	No
X/SB	.0959	.0726	+	+	Yes
Student-to-Student Interaction	.0256	.0195	+	+	Yes
3/GT	.0085	.0029	+	−	No
RCF_3	.2449	.0023	+	−	No

* *STINT group means minus Non-STINT group mean.*

TABLE VIII

t-TESTS OF SIGNIFICANCE FOR MEASURES REFLECTING CLASSROOM TEACHING PRACTICES: STINT GROUP vs. NON-STINT GROUP*

Measure	STINT Group Mean (N=46)	Non-STINT Group Mean (N=40)	STINT Group Standard Deviation	Non-STINT Group Standard Deviation	df	t	p
RCFL	1.3959	1.4029	.8191	.9991	84	0.04	N.S.
BBT/TB	.1853	.2162	.1976	.1722	84	0.77	N.S.
# Responses per Solicitation	1.1482	1.1022	.2521	.2595	84	0.83	N.S.
X/SB	..0959	.0726	.0832	.0577	80	1.49	<.05
Student-to-Student Interaction	.0256	.0195	.0269	.0173	83	1.23	N.S.

* *Measures in which the means (STINT group mean minus non-STINT group mean) lay in the expected direction.*

Students' Social Functioning

A sociometric instrument was administered to a sub-sample of four STINT and four non-STINT classes. The resulting data are shown in Table IX. It is evident that in both components of social isolation identified (i.e., the number of social isolates reported and the total number of non-reciprocated social selections made), there was little social isolation manifested in the classrooms visited. Moreover, there appeared to be no meaningful differences between the STINT and non-STINT classes on these measures.

VI. FINDINGS BEARING ON GOAL NUMBER SIX

Goal Number Six - To develop a more sensitive and highly-developed response to non-standard (i.e., urban ghetto) classroom situations.

Two kinds of data were collected in relation to this goal: (1) data reflecting on teacher attitudes and morale in relation to their jobs; and (2) ratings of teachers' responses to stressful classroom situations typical of urban ghetto schools.

The Purdue Teacher Opinionnaire

The means of 34 STINT and 27 non-STINT teachers' responses to several factors of the Purdue Teacher Opinionnaire as well as to the total instrument were inspected to determine whether they lay in the expected direction. In all cases, this was the case (Table X). The means of both groups on each measure were thus subjected to t-tests to determine whether or not the differences were significant. Although the difference between the means of the two groups on first measure (satisfaction with teaching; hypothesis 21) did not quite reach significance at the .05 level, it was reported ($p < .06$) because of its importance to the overall study.

On the second measure (rapport among teachers; hypothesis 22), STINT teachers scored significantly higher than their counterparts in the non-STINT group. ($p < .05$) Thus hypothesis 22 - that STINT teachers participating in the evaluation manifest more positive attitudes about their colleagues than do their non-STINT counterparts - was accepted ($p < .05$).

On the third measure (teacher load; hypothesis 23), STINT teachers scored significantly higher than the non-STINT teachers ($p. < .05$).

On the fourth measure (school facilities and services; hypothesis 24), STINT teachers did not score significantly higher than the non-STINT teachers.

TABLE IX

SOCIOMETRIC DATA: NUMBER OF SOCIAL ISOLATES IDENTIFIED, AND NUMBER OF NON-RECIPROCATED SOCIAL SELECTIONS MADE IN STINT AND NON-STINT CLASSES VISITED

	STINT Classes	Non-STINT Classes
Total Number of Students Present in Classes Visited	73	83
Total Number of Isolates Identified (among students present only)	2	3
Total Number of Non-Reciprocated Social Selections Recorded	3	4

TABLE X

t-TESTS OF SIGNIFICANCE FOR TOTAL-INSTRUMENT AND INDIVIDUAL FACTOR SCORES ON THE PURDUE TEACHER OPINIONNAIRE: STINT GROUP VS. NON-STINT GROUP

Factor Examined	STINT Group Mean	Non-STINT Group Mean	STINT Group Standard Deviation	Non-STINT Group Standard Deviation	df	t	p
Satisfaction with Teaching	65.185	61.971	93.702	133.981	59	1.156	<.06*
Rapport among Teachers	41.926	38.294	59.768	72.454	59	1.723	<.05
Teacher Load	37.00	35.129	16.459	21.178	59	1.661	<.05
School Facilities and Services	14.185	13.235	11.696	14.123	59	1.020	N.S.
Total Instrument	294.000	280.559	354.314	1334.0003	59	1.423	<.05

*Due to the crucial nature of this factor, an exception was made in reporting the significance of the difference between the two group means at slightly above the .05 level.

On the fifth measure (the global measure of teacher morale, which included all of the factors in the instrument; hypothesis 25), STINT teachers scored significantly higher than the non-STINT teachers ($p < .05$)

The "Stressful Situations" Questionnaire.

Although the instrument was issued to 46 STINT teachers and to 40 non-STINT teachers, a total of only nine STINT and nine non-STINT teachers returned their questionnaires.

Despite the low return rate, a full analysis of the data was performed, inasmuch as the proportion of returns in both groups was nearly identical. Moreover there was no reason to suspect that the motives, skills, etc. of the STINT respondents were different in any identifiable way than those of the non-STINT respondents.

Contrary to expectation (hypothesis 26), the consistently lower item scores of the STINT teachers (Table XI) indicate that they responded more promptly and harshly to the stressful situations presented in the instrument. They were more inclined to deal with these events by punishing, reprimanding, or rebuking than were the non-STINT teachers. Teachers in the latter group were less likely to treat the events as serious or offensive, and more often either permitted them to pass, or offered non-hostile, non-evaluative comments about them.

TABLE XI

JUDGES' RATINGS OF STINT & NON-STINT TEACHERS' RESPONSES TO THE "STRESSFUL SITUATIONS" QUESTIONNAIRE ITEMS

Item	Mean: STINT Teachers	Mean: Non-STINT Teachers
1	.74	1.04
2	1.30	1.56
3	.67	.74
4	.63	.78
5	.56	.67
6	.78	.89
7	.41	1.07
8	.48	.63
9	.33	.70
10	1.07	1.04
11	.56	.56
12	.59	.89
13	.56	1.30
14	.85	1.15
15	.59	.63
16	1.00	.96
Mean for All Items	.69	.91

Note—Higher scores denote more skillful performance.

DISCUSSION

Findings Bearing on Goal Number One:

There are interesting similarities and dissimilarities in the viewpoints expressed by the program coordinators and teacher-trainers on items dealing with satisfaction with the program.

Surprisingly, a majority of program coordinators felt the need for more teacher-trainers in the program, whereas the teacher-trainers themselves appeared to be satisfied that there were enough of them to service all of the STINT teachers.

Ordinarily, one would expect the program administrators to be relatively less sensitive to an issue such as work-load, while the in-field practitioners (in this case, the teacher-trainers) would be excepted to react strongly to the issue. The only other data that provide a meaningful clue about the unanticipated teacher-trainer response here was the pattern of their responses to item 12 in the questionnaire, reflecting the strong interest in making the teacher-trainer job a permanent supervisory position in the New York City schools. It is possible that the teacher-trainers see themselves as members of a relatively exclusive "club" of supervisory personnel, and, as is often typical, they wish to keep the membership in their club exclusive and limited. It is puzzling, however, to note that although the teacher-trainers indicated that the ratio of teacher-trainers to participating teachers was largely adequate, only a slight majority of them felt that they were able to see the teachers they supervised as often as they would have liked. The lack of consistency between this assertion and their reaction that the ratio of their numbers to that of the teachers was largely satisfactory suggests that other factors affected their responses to the work-load issue.

The responses of the teacher-trainers to the item which solicited their comments (item 12) was fascinating. One must be impressed with the depth of thinking about their role reflected by their responses to this item. In addition, the realistic and highly-constructive nature of their suggestions about improving the functioning of the entire program (as well as strengthening their own functioning) is impressive. It is heartening that the items receiving the largest number of mention have to do with the teacher-trainers' professional self-improvement. As might be expected, there was heavy emphasis on making the teacher-trainer job into a more highly-structured and permanent supervisory position in the school system, with clear guidelines for the teacher-trainers' responsibilities.*

The degree of commitment of the teacher-trainers to the program is commendable. The maturity of their thinking about program issues, their generally high morale, and their overall enthusiasm suggests that--in a time of great dissatisfaction and discontent in urban public schools--a good "fit" between a number of professional people and their job has been found.

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*There appears to be ample justification for this desire for a more precise definition of the teacher-trainer role. To begin with, teacher-trainers are frequently assigned administrative duties in the schools that are unrelated to their intended role of providing support for new and inexperienced teachers. Secondly, the teacher trainers frequently work with a far greater number of new and inexperienced teachers than the originally-intended formula provided (i.e., a 9-to-1 ratio). Thirdly, the position of "teacher-trainer" is highly impermanent. Because the program is funded on year-by-year basis, most or all of this year's skilled, highly-trained teacher-trainers could be returned to the classroom next September. In addition to the school system losing highly-competent supervisors that have "come up from the ranks" in a most evident way, this back-and-forth shifting of jobs creates a stressful professional uprooting for these teacher-trainers. Finally, there is the chagrin felt by the teacher-trainers about the lack of continuity for a program to which they are strongly committed, and which they perceive to be highly valuable.

Parenthetically, it should be mentioned that the image of an active group of practitioners created by the teacher-trainers in responses to items dealing with their use of time is strongly supported by the way they responded to the discussion item in the questionnaire. Additionally, the fact that such a large proportion of the teacher-trainers (125 out of 186) returned their completed questionnaires at the end of the school year suggests an encouraging vitality.

Findings Bearing on Goal Number Two:

The fact that principals in the STINT schools did not rate their new teachers more positively than principals in the non-STINT schools was surprising. However, this finding ties in quite well with a clear pattern that emerges from the data in the entire study: that on measures having to do with job satisfaction and comfort on the job, STINT teachers do remarkably well, while on measures having to do with teaching skill, they do not perform better than their non-STINT counterparts. This issue and its implications, will be discussed in greater depth at the end of the discussion section.

Findings Bearing on Goal Number Three:

Although only partial data were available on teacher-turnover, the two findings reported were consistent and unequivocally clear. The remarkable fact that not a single STINT teacher out of approximately 180 involved in the program in a highly-turbulent district either resigned or requested a transfer suggests that the STINT program is clearly producing an effect among new and inexperienced teachers that runs counter to the current rash of teacher-turnover and resignations in urban school systems.

Findings Bearing on Goal Number Four:

Of the ten observational measures focusing on flexibility and openness of communication in the classroom, STINT teachers performed more positively on only one (the number of spontaneous student contributions performed in their classrooms). These findings suggest raising the obvious question about whether the measures selected for examination in the present study (i.e., those felt to reflect on more open and flexible patterns of communication within the classroom) were appropriate, especially in terms of the setting in which the program was conducted. However, data from previous studies (using the same instrument in similar educational situations) over the past five years have revealed substantial numbers of significant findings bearing on openness of communication in the classroom. If anything, the observational data collection in the present study was "cleaner" than at almost any time in the past, and the skill level of the present group of observers was equal to the best of the past. Therefore, it might be fruitful to seek some other explanation for the lack of signifi-

cant differences between the STINT and non-STINT groups on these measures. One promising explanation is that mentioned in relation to the principals' evaluations of their new teachers: that the effects of the STINT program were felt more positively in the area of job satisfaction than in the professional skill area. Viewed in this light, the observational data fall predictably into place.

Findings Bearing on Goal Number Five:

It would be interesting to examine the student absenteeism data when they become available, to see whether the apparent job-satisfaction gains manifested by participants in the STINT program generalize to their students. Specifically, is the fact that the STINT teachers appear to be happier and more comfortable on the job reflected in their students' feeling more positive about school and thus showing a higher rate of attendance? Due to the lack of data at the present time, however, it is only possible to conjecture about the interpretation of the student absenteeism data that will be collected.

The analysis of the data collected about the incidence of social isolation in the STINT and non-STINT classes proved interesting. It is almost impossible to accept the data gathered from the STINT schools as being valid because of the extremely high absenteeism in the classes on the days that the data were collected (nearly one-third). When the absentee children's data are included, the number of cases of social isolation jumps from two to eighteen. This is partially due to the fact that children who are not present are not visible to their classmates, and are thus not selected; moreover, nearly one out of every three "votes" was missing. Thus, a lot of children who received no votes (i.e., those identified as victims of social isolation) might have been selected by one of the nearly one-out-of-three missing children. The data collected from the non-STINT classes would tend to support this assumption. In the non-STINT classes, the absenteeism on the days that the data were collected was not nearly as severe as in the STINT classes (slightly under 19 percent). However, the incidence of social isolation rose remarkably in the non-STINT classes when the absentee children were included in the computations. In this situation, the number of cases of social isolation jumped from three to eleven. Because the proportion of children absent was substantially less than that in the STINT classes, it is not surprising that the size of the jump in the number of cases of social isolation was not as great as in the STINT classes. Moreover, it should be noted that the number of classes included in this part of the study were relatively small: only four STINT and four non-STINT classes were examined. Because of all of these contaminants, elaborate attempts to interpret the sociometric data as a reflection - either positive or negative - on the STINT program is inappropriate.

The sociometric instrument, however, provides a way of collecting a very important kind of information about students' social functioning in the classroom. Intensive investigation of available instrumentation in this area prior to the selection of the sociometric instrument produced almost nothing usable on the elementary grade level. Although the sociometric instrument is by no means a new technique, there has been little development in the structure for interpreting the data it produces. A feeling persists that somewhere within the technique lies the basis for a very potent and definitive way of analyzing social phenomena in the classroom. A small first step was made during the course of this study, in identifying non-reciprocated selections made by students. However, there is little formal tie-in between this measure and any definitive theoretical foundations. A more thorough investigation of the literature and continued exploration and experimentation with the data produced by the sociometric instrument may produce a more highly structured and useful technique for quantifying this important area of students' classroom functioning.

Findings Bearing on Goal Number Six:

The data produced by the Purdue Teacher Opinionnaire show a clear pattern of superiority in teachers' attitudes and morale for the STINT group. In light of the lack of significant differences in so many of the other variables examined in the present study, the Purdue Teacher Opinionnaire data seem to be "zeroing-in" on something very crucial to the STINT program. It was, in fact, the findings from the Purdue Teacher Opinionnaire that generated the initial thinking about the dichotomy between job satisfaction and skill development as an output of the program. This thinking was, of course, enhanced by the limited but potent data that were collected about teacher-turnover in the STINT and non-STINT groups. It is not inappropriate to emphasize again that, at a time when morale in large urban school systems is at an all-time low, the finding that a program generates significant improvement in new and inexperienced teachers' attitudes, morale, and general job satisfaction cannot be overlooked.

The reversal in the "stressful situations" questionnaire data need not be viewed as unusual, when considered in the context of the supposition expressed in earlier parts of this section; i.e., that the strengths of the STINT program (at least in a single-year test of the program) lay more strongly in the area of job satisfaction than skill development. Thus, if teachers' responses to the "stressful situations" questionnaire can be judged on a scale reflecting a high or low degree of skill, it is not surprising that the STINT teachers did not exceed their non-STINT counterparts on this measure. What is surprising, however, is that the non-STINT teachers scored almost uniformly higher on the items than the STINT teachers (and that this difference was statistically significant beyond the .05 level). This suggests that the STINT teachers dealt with problem or stressful situations in a substantially different

way than their non-STINT counterparts: that they less often attempted to translate the problem into a useful learning experience and were more inclined to respond in an immediate and generally more punitive fashion. It may be the fact that they were more successful overall by dealing with stressful situations harshly, immediately and unequivocally. The fact that the STINT teachers were happier on the job suggests that everyday stresses and strains bothered them less than such situations did their non-STINT counterparts. It may be hypothesized that, to a certain extent, some of the more apparently moderate treatment accorded the stressful situations by the non-STINT teachers amounted to a kind of "pussyfooting" or avoiding coming-to-grips with the problem, when, in fact, a more immediate and unequivocal response was called for. If, in fact, the ability to respond immediately and appropriately (albeit harshly) is, in fact, a skill, then there may be a kind of superiority in this rather unexpected area of skill on the part of the STINT teachers. Continuing along this line of thought, if this ability reflects a kind of skill, there would be no mystery about the source of the STINT teachers' training in this area. The STINT program is based on providing the new and inexperienced teachers with the fruits of the experience of the teacher-trainers, with whom they have intimate contact during the entire school year. Certainly, "survival skills" (and dealing with stressful classroom situations must be considered within this category) would be an item high on the agenda of the teacher-trainers, even if it is not treated as such in a formal sense. According to all available data, the fact remains that the STINT teachers do tend to stay on the job, and seem to be significantly happier on the job as well. If they have learned to weather everyday stressful classroom situations in a way that permits this to accrue, but, at the same time, is not damaging to student morale, some rethinking may be in order about the way teachers in urban ghetto schools should handle stressful situations like those examined in this study.

It is also possible that there is a difference in the level of reality contained in the responses of the STINT and non-STINT teachers to the questionnaire. It is possible that the STINT teachers through their close contact with the teacher-trainers, had developed definite ways of dealing with problem situations, and reflected these accurately in their responses. On the other hand, the lack of this kind of resource for the non-STINT teachers may have precluded their developing any definite ways of dealing with problems, and that their responses to the items may thus have been based largely on conjecture, or perceptions of idealized reactions that could not realistically have been implemented in their classrooms. As a result, their responses may "look" better (significantly better, as in the present case), but may not reflect the way in which they would actually deal with such problems when they arise in the classroom.

Mention should be made of the enthusiasm for the instrument expressed by the judges who rated the teachers' responses, along with other professionals involved with the study who encountered it. The fact that the situations were taken from real-life occurences provides a refreshing contrast to the typically artificial situations that

seem to be used with great frequency these days, and that are so unreal and monotonous. Credit must be given to Dr. Anne Edelmann and her associates at Temple University for the patience and thoroughness that obviously went into the development of the original instrument. As it was used in the present study, the sixteen-item instrument is only a small part of the total instrument developed by Edelmann. It is interesting to conjecture about whether the results in the present study would have been changed had other items been selected from the total instrument. Nevertheless, the selection procedure reflected the best professional judgment of the entire project staff, and represented a broad and comprehensive grouping of items.

General Discussion

Despite the finding that the STINT teachers did not manifest superiority on measures relating to certain areas of teaching skill, there was an intense and nearly-unanimous conviction expressed by the program coordinators and teacher-trainers that the program was working. The data bearing on "job satisfaction" (the Purdue Teacher Opinionaire data and the teacher-turnover data collected to the present) strongly support the fact that -- in one of the two major areas of investigation -- the program was having its desired effect. Perhaps, although the development of teaching skills is included in the stated goals for the program, the people who have direct responsibility for running the program in the field -- the teacher-trainers -- have set their sights primarily on helping their charges to acquire basic "survival skills" for teaching in urban schools, and measure their success over a nine-month period by the fact that few of their supervisees give up and quit (as compared to the large number that leave throughout the school system). Thus, for them, the first and most basic goal is to retain the new teachers. It this is so, one can hardly fault the teacher-trainers' decision to make retention of new teachers their number one priority, for if these teachers leave, all of the skill training that they have been exposed to is lost. If they remain, skill-development programs can always be conducted. It may be that - with the limited number of visits that the teacher-trainers have with the STINT teachers - the bulk of their time and energy was devoted largely to the acclimation process discussed earlier, and that little time was left for working on teaching skills. Thus, it simply may not be realistic to expect to accomplish both job satisfaction and skill-development in nine months' time. Therefore, it is quite practical first to focus on keeping the teachers in the system, and helping them to feel comfortable and secure in their jobs; and then focus on further developing their pedagogical skills.

It would be interesting to see whether or not these suppositions concerning the operational priorities of the teacher-trainers are supported by the data. This suggests additional data collection, and will be dealt with in more detail later in the section, "Implications for Future Research."

Inasmuch as no direct measure of student morale was undertaken in this study, the student attendance data to be gathered shortly after Labor Day for both STINT and non-STINT groups will be interpreted as reflecting students' attitudes about their teachers. This has particular application in terms of assessing the ways that students reacted to the STINT teachers' typically more direct and punitive way of dealing with classroom problems. (Here, the careful matching procedure apparently paid off, in the sense that the numerous factors affecting students' attendance should be nearly identical in each matched pair of STINT and non-STINT schools.)

Finally, it would also be interesting to see if the full teacher-turnover data for 1969-70 that will be collected at the beginning of the school year 1970-71 support the findings to the present (i.e., clear superiority of the STINT group in terms of the number of teachers lost to resignations or transfers).

Limitations of the Present Study

There are a host of logistics communications problems that are invariably a part of data collection in a large public school system*.

Based on this year's experience, it is clear that even under the best circumstances the proportion of voluntary returns of questionnaires and other data-collection devices is bound to be disappointing. Only twenty percent of the teachers in each group returned the "stressful situations" questionnaire. (Perhaps responding to this questionnaire created a "stressful" situation.) Only forty percent of the program coordinators returned the simple ten-item "yes"-"no" questionnaire that they received. (The rate of returns on the Purdue Teacher Opinionaire was more encouraging: approximately 70 to 75 percent overall.) Moreover, once the school year officially ended, it was impossible to acquire either student attendance or teacher-turnover data from any source within the school system.

It should also be mentioned that in District 9 all of the teacher-trainers were pulled out of their regular schools around the middle of the school year, in order to cover the many schools in the district that were not allocated funds for teacher-trainers. Two of the seven STINT schools in this study were from District 9. Thus, two of the seven STINT schools received only half a program. There is some question about whether this reduction in program for such a large portion of the STINT sample biased the results (i.e., reduced potential differences).

*These have been delineated in detailed fashion in a proposal to conduct a further evaluation of the STINT program next year. Relevant sections have been abstracted from this document, and are included in the Appendix.

Implications for Future Research

In relation to the unanswered questions about the job satisfaction versus acquisition of skills concept proposed earlier, three kinds of data-collection techniques are recommended for further investigation of the STINT program: (1) acquiring information from the program coordinators; (2) acquiring information from the teacher-trainers; and (3) acquiring information at the end of school year 1970-71 about teaching skills among this year's STINT group.

To acquire the desired information from the program coordinators, the following questions might be asked:

1. How strongly did you value and/or emphasize to the teacher-trainers the development of specific teaching skills among the STINT teachers, as contrasted with the development of comfort and job satisfaction?
2. Was there a formal structure developed in your district for teacher skill development (or was this left largely to the teacher-trainers)?
3. If there was a formal structure, how was this communicated to the teacher-trainers (e.g., were there staff development institutes for teacher-trainers, focusing on improving teachers' skills)?

To acquire the desired information from the teacher-trainers, the following questions might be asked of them:

1. Did you expect to develop specific teaching skills among your supervisees? Were you expected to, and/or did you include this in your own goals?
2. Did you receive a highly-structured program for the development of teaching skills (or was the structure for skill development left largely to you to create and implement)? If you did receive a structure for development of teacher skills, was it consistent with that received by other teacher-trainers in your district and in other districts?
3. Was most of your time and effort this year spent on acclimating new and inexperienced teachers to their jobs, helping them to develop appropriate techniques and routines, being handy for emergencies, and providing a sympathetic ear, in contrast to working with the teachers on the development of specific teaching skills?

To determine whether, in fact, this year's STINT program did provide a foundation for new teachers to build on and develop on, it would be useful to re-test this year's group next year - at the end of their school year - to see if increased teaching skills have accrued. Of course, the same should be done with this year's group of non-STINT teachers. This could be a simple "post-only" design, as this

year's data would, in essence, constitute the "pre" round.

It would be useful to measure directly students' attitudes in the classes of participating STINT teachers, using an appropriate instrument. It is felt to be important to answer the question about whether the STINT teachers' (verbalized) more immediate and generally more punitive manner of dealing with stressful situations affected student morale in any (systematic) negative way.

Because of the strong interest expressed in the sociometric instrument by the teachers tested, and the promise it seems to hold for communicating vital information about the social structure of the classroom, further development and refinement in the analysis and interpretation procedures should be undertaken. Following this, the instrument should be re-administered in the field, for further examination.

It would be useful to field test a number of additional items from the original Edelmann instrument from which the "stressful situations" items used in this study were drawn. In addition, an intercorrelation (and possibly - with a large enough sample - a factor analysis) of all of the items could be performed, in order to identify broad groupings of problems treated by the instrument. By identifying different areas of classroom problems within the instrument, a more highly-defined analysis of teachers' ways of handling stressful situations would be possible, and potentially more useful information could be acquired, both for research and staff-development purposes.

To produce a more useful observational study design for evaluating the STINT program, information should be solicited from the parties directly involved in the part of the program dealing with teaching skills (i.e., the teacher-trainers, and the STINT teachers) concerning the kinds of patterns of teacher and pupil behaviors that they feel are appropriate in the classroom and are likely to accrue from the program. This information should then be used as a basis for making decisions about which measures would be appropriate to examine (from the total data produced by the observations), rather than do this on the basis of inferences, as was done this year.

A "pre" round of data would, undoubtedly, have added a great deal of strength to the study in the sense that baseline information would have been available for the STINT versus non-STINT comparisons. Moreover, the presence of solid baseline data would have permitted the matching procedures for subjects in both groups and their teaching situations to have been somewhat more relaxed (as contrasted with the almost compulsive way in which this was done in the present study). In turn, a larger sampling would have been possible. With a larger sample, there could be greater confidence that factors not controlled in the selection procedure were randomly distributed among the two groups. In addition, there could be greater confidence in the external validity of the data (i.e., its generalizability), and

greater power in the statistical tests applied.

Based on this year's experience, all future data that must be acquired directly from schools or the school system (such as teacher-turnover and student attendance data) will have to be collected well in advance of the close of school. Although some information is lost in this way (i.e., at the tail-end of the school year), there appears to be no other way to insure that these data can be collected in time to be included in the final project report.

SUMMARY

Background

The present study was an evaluation of the program, "Supportive Training for Inexperienced and New Teachers" (STINT), in New York City schools. The STINT program is funded by the Office of Urban Education of the State of New York, and is designed to provide critical support for new and inexperienced teachers in urban schools. This support is given by a group of "teacher-trainers" - skilled and experienced teachers on 100% released time, who work closely with the participating teachers as constant and friendly resources.

The six major goals of the STINT program evaluated in the present study were:

1. To provide a variety of supportive service to new and inexperienced teachers.
2. To develop greater competence in new and inexperienced teachers.
3. To decrease staff turnover among the participants.
4. To help new and inexperienced teachers develop a more effective methodology.
5. To provide an improved learning situation for the students of the participating teachers.
6. To develop a more sensitive and highly-developed response to non-standard (i.e., urban ghetto) classroom situations.

Design

Seven carefully-matched pairs of STINT and non-STINT schools were used in the study, from which 48 STINT and 49 non-STINT teachers were drawn, using stratified random sampling procedures.

Two kinds of data were collected: (1) "within-program" data; and (2) comparative data (STINT group versus non-STINT group). The "within program" measures included questionnaires given to district program coordinators and teacher-trainers (goal number 1). The comparative measures included measures of principals' (structured) evaluations of their new teachers' professional development (goal number two), teacher-turnover data for all STINT and non-STINT teachers participating in the study (goal number 3), live observational data focusing on open and flexible patterns of communication in the classrooms (goal number 4), student-attendance data for all STINT and non-STINT classrooms involved in the study, and data about the frequency of social isolation in a sub-sample of the STINT and non-STINT classes (goal number 5), teacher attitude and morale data, using the Purdue

Teacher Opinionnaire, and data about STINT and non-STINT teachers' characteristic mode of responding to stressful classroom situations (goal number 6).

Measures in which the n's were too small to support statistical analysis were reported in descriptive form. On all other measures, the means were inspected to determine whether they lay in the expected direction. On those measures in which the means lay in the expected direction, appropriate statistical procedures were applied, to test the significance of the differences.

Findings

In response to a 10-item questionnaire, the program coordinators expressed satisfaction with the funding of the program, the criteria established for selecting participating teachers, the quality of the teacher-trainers, the frequency with which the teacher-trainers met with their supervisees, and the amount of time spent by the teacher-trainers with their supervisees when they met. The program coordinators were split on the issue of whether there were enough teacher-trainers to do an adequate job, but were largely in agreement that there should be changes in the structure of the program in their districts. Because of the small number of program coordinators involved in the study (12) no statistical tests were applied to the findings.

In response to a 12-item questionnaire, teacher-trainers expressed significantly more positive opionions about the length of time spent with their supervisees when they met, the nature of the staff development activities they participated in, the criteria used for selecting participating teachers, the lack of resentment among the experienced teachers involved in the program, the number of the teachers that they worked with, and the basic structure of the program. The first four of these were significant beyond the .001 level, while the last two were significant at approximately the .06 and .07 levels, respectively.

Teacher-trainers did not express significantly more positive opinions about the frequency with which they met with their supervisees. The teacher-trainers also made a large number of constructive recommendations about improving the conduct of the program.

Principals of the STINT schools involved in the study rated their teachers more positively on a ten-item questionnaire than did principals of the non-STINT schools. However, the differences in the ratings of the two groups were slight, and were not statistically significant.

Full teacher-turnover data were not available prior to the preparation of the final report of the evaluation, and will be included in a supplement. However, two findings were reported: (1) that in a highly-turbulent district in New York City, none of the

approximately 180 teachers participating in the STINT program either resigned or requested transfers during the school year 1969-70; and (2) of the 49 teachers in the original STINT sample, only two resigned during the school year (approximately 2%) in contrast to 8 out of the 48 teachers in the original non-STINT sample (approximately 16%).

Out of 10 observational measures examined, STINT teachers showed superiority on only one - the relative number of spontaneous, unsolicited contributions performed by students. This difference was significant beyond the .05 level.

Student absenteeism data were not available prior to the preparation of the final report of the evaluation, and will be included in a supplement.

There were roughly similar numbers of cases of social isolation and non-reciprocated social selections in the STINT and non-STINT sub-groups tested on the sociometric instrument. However, because of the high absenteeism in the classes visited (particularly in the STINT- classes - approximately 31%), the data were considered to be largely invalid.

STINT teachers' attitudes - as measured by the Purdue Teacher Opionionnaire - were more positive than those expressed by non -STINT teachers responding to the instrument. Contrary to expectation, STINT teachers did not verbalize more accepting and less punitive responses to stressful situations.

Conclusion

It was evident from the data, that on measures dealing with job satisfaction and comfort on the job (i.e., teacher-attitude data and available teacher-turnover data) STINT teachers showed clear superiority. However, on measures of teaching skill, STINT teachers did not manifest superiority enough time in the program. It is possible that there was not enough time in the program to achieve both goals, and that the retention of new and inexperienced teachers was perceived to be the most basic one. It may have been felt that once this was accomplished, the development of greater skills could be dealt with at a later time. With this in mind, it was suggested that further studies be conducted. In addition, it was suggested that this year's participating STINT and non-STINT teachers be measured on the "skill" variables at the end of the next school year, to determine whether the skill development that was expected to accrue once the teachers were firmly planted in their jobs actually took place.

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APPENDIX

UNPUBLISHED INSTRUMENTS USED IN THE EVALUATION

1. Office of Urban Education Program Coordinator's Questionnaire
2. Teacher-Trainer Questionnaire
3. Principals' Questionnaire
4. The Sociometric Instrument
5. "Stressful Situations" Questionnaire

Name_____

District_____

STINT PROGRAM EVALUATION

Extent of Implimentation Questionnaire
for District STINT Coordinators

1. In your opinion, was the program funded adequately?

2. Were you satisfied with the criteria set forth for selecting participating teachers?

3. Were there enough teacher-trainers to do an adequate job (in terms of the number of teachers participating in the program)?

4. Would you have wanted greater coverage for the program within the district?

5. Were you satisfied with the teacher-trainers?

6. Did the teacher-trainers get to see the participating teachers often enough?

7. Did they spend enough time with the teachers when they did get to see them?

8. Would you recommend any changes in the structure of the program? (Please be as specific as possible.)

9. Based on this year's experience do you feel that the program should be geared toward new teachers only, or include relatively "experienced" teachers as well (i.e., 1 to 3 years' experience)?

10. Are there any issues that you would like to have discussed or commented about that did not appear in this questionnaire?

Name_____

District_____

STINT PROGRAM EVALUATION

Extent of Implimentation Questionnaire
for Teacher-Trainers

1. Did you get to see the teachers you worked with as often as you would have liked?

Yes ____ No ____

2. When you got together with a teacher did you have enough time with him or her?

Yes ____ No ____

3. Did you participate in any useful staff-development activities yourself?

Yes ____ No ____

4. If you had your choice, would you have selected the participating teachers on any different basis than was done this time?

Yes ____ No ____

5. What proportion of your time was spent in private consultation with a teacher or teachers (in contrast to being in the classroom with the teacher)?

Yes ____ No ____

6. When you were in the classroom, what proportion of your time was spent in an "active" capacity (i. e. teaching a demonstration lesson, etc) observing?

7. Did the first-year teachers benefit more from the program than those with at least one or more years experience?

Yes ____ No ____

8. Did you note any resistance or resentment among the teachers with at least one or more years' experience?

Yes ____ No ____

9. Do you feel that the number of teachers that you worked with should have been smaller or larger (or the same)?

Larger ____ Smaller ____ Same ____

10. Did the structure of the program differ in any significant way from the original plans for STINT in your district?

Yes ____ No ____

11. Would you like the program to have been structured any differently?

Yes ____ No _____

(Please explain:)

12. Are there any issues that you would like to have discussed or commented about that did not appear in this questionnaire?

PRINCIPALS' QUESTIONNAIRE

1. What is your overall rating of your "new" teachers?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

2. What is your perception of your "new" teachers' attitudes toward teaching?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

3. How effectively do your "new" teachers make use of various educational specialists, such as reading specialists, counselors, etc?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

4. How effective is your "new" teachers' utilization of learning aids, such as audio-visual equipment, etc?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

5. How skillful are your "new" teachers in managing children?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

6. How well have your "new" teachers adapted to the differences in cultural backgrounds that may exist between themselves and the children?

1	2	3	4	4
Poor	Fair	Average	Good	Excellent

7. How relevant and interesting do you feel the classroom preparations of your "new" teachers are to the students?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

8. How effectively do your "new" teachers utilize small-group instruction within the classroom?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

9. How well do you think your "new" teachers maintain their composure under classroom stress?

1	2	3	4	5
Poor	Fair	Average	Good	Excellent

10. What percentage of your "new" teachers would you recommend for merit increases if such a system were in effect in New York City?

1	2	3	4	5
0%	25%	50%	75%	100%

CLASSROOM SITUATIONS

The attached classroom situations are actual incidents that were submitted by teachers.

Assume that you are the teacher, and that the incidents are taking place in your classroom. Write what you would say (keeping the dialogue form). If you would not say anything, write what you would or would not do at that moment.

Be as brief and as spontaneous as you can be.

CLASSROOM SITUATIONS

1. During a health lesson.

TEACHER: Is there anyone in the class who can tell me why it is important to take a bath?

JOE:(Aside) Because we will smell like John. (Referring to another boy in the class)

JOHN: (to Joe) Did you ever smell yourself (Loudly)

TEACHER:

---

2. Physical Education class.

TEACHER: All right children we must do some exercises before we play any games.

STUDENTS: Do we have to?

TEACHER: Yes, you do. Don't you want to grow up to be strong like me?

STUDENTS: (giggle)

TEACHER: Why are you laughing?

JOHN: We don't want to be fat like you.

TEACHER:

---

3. A Social Studies class which is very noisy.

TEACHER: If you do not stop talking, you will all have to write.

SEVERAL VOICES: We are not all talking.

TEACHER:

---

4. A substitute teacher has just had the class do written work.

TEACHER: Now, class, pass your papers over to your left side.

SEVERAL VOICES: Mr. Smith always has us pass them to the front of the room.

TEACHER:

---

5. Jane gets up from her desk to put an example on the board. Joe slams his desk into her chair.

TEACHER:

---

6. The class was told to leave their spelling work on their desks before going to recess. They were not to go until the spelling assignment had been completed. All went. John did not leave his spelling work. After recess, the teacher speaks to John.

TEACHER:

---

7. During a Social Studies class, Mary raises her hand.

MARY: Mrs. Smith, may I leave the room?

TEACHER: Yes. (Mary leaves and returns twenty minutes later)

TEACHER: (Looking up as Mary enters the room.) Mary, what took you so long?

MARY: I was makin'!

CLASS: (Begins laughing)

TEACHER:

8.

TEACHER: Mary, why are you crying?

MARY: Jane took my quarter. It was change from lunch and I have to take it home.

JANE: It's my quarter, my mother gave it to me.

TEACHER:

---

9. Children have work to do at their desks. Boy is out of his seat.

TEACHER: John, what are you doing out of your seat?

JOHN: I want to sharpen my pencil.

TEACHER:

---

10. Joan's cumulative record was a passing one. She did everything she was asked to do in class, but showed little enthusiasm for school, for her playmates, for the teachers. She rarely volunteered anything. Today, the teacher was discussing with the class what they could arrange for an assembly program. The teacher listed the suggestions on the blackboard. Noting Joan staring out into space the teacher asked.

TEACHER: Could you add to this, Joan? (No answer.)

TEACHER:

---

11. Graphic Arts Class.

Situation: A boy continually came to the room four or five minutes after the rest of the class. After the fifth time:

TEACHER:

---

12. Graphic Arts Class.

Situation: After a dispute with another boy in a previous class, John reported to this class and continued the dispute with the boy.

PUPIL: You told Mrs. Jones a lie and I'm going to whip your ass!

TEACHER:

---

13. Science Class.

Situation: New science equipment was spread out all over the tables in the classroom-laboratory. One pupil picks up a piece of equipment and starts examining it.

TEACHER:

---

14. Social Studies Class.

Situation: Upon entering room Ted is punched in the back by Larry.

TED: You son-of-a-bitch! (He punches Larry.)

LARRY: Don't! I'm just foolin' around.

TEACHER:

TEACHER:

---

15. English Class.

Situation: Girl is combing her hair in class.

TEACHER:

---

16. Math, Average Class.

Situation: Class is in the midst of board work. Suddenly teacher becomes aware that a boy (who is doing failing work) is engrossed in a comic book. Teacher quietly and unobtrusively took the book.

STUDENT: I'm leaving. (Loudly)

TEACHER:

CLASSROOM SITUATIONS

INSTRUCTIONS TO RATERS

1. Enter all your ratings on the accompanying Answer Sheet. Begin with item #1 and proceed to rate all 19 subjects according to criteria for item #1. When completed, proceed in the same manner with item #2, item #3...item #16.

2. Each item must be rated according to its own 3-point criteria. The sixteen individual scales and their criteria appear in the accompanying booklet. Since all rating scales are trichotomous, you may not use half-steps but whole integers only (i.e., 2, 1, or 0 only!). Choose the one scale number which best characterizes the subject's written statement.

3. Note well that whenever you score a statement as a "0", a letter rating must also be inserted on the answer sheet immediately following the "0". The letter will denote what particular aspect of the situation was offending to the teacher. This letter scale appears on the last page of your Item Booklet along with additional instructions.

4. On items in which the subject did not write any statement or in which the subject explicitly refused to answer (for any reason): score the Item as a "1."

5. Since this particular phase of the study is a pilot, please feel completely free to comment, criticize and call attention to any ambiguities, errors, etc. Be sure to write your commentson a separate sheet of paper (and not on the protocols).

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 1

2 - Utilizes Event to Benefit Students: teacher does not regard pupil's remark or action as "offensive," but as humorous &/or as informative; remakr or action is incorporated into on-going lesson as point of reference, example, explanation, etc.

1 - Minimizes Event; Ignores or Responds Non-evaluatively: Teacher ignores remark or event completely; no response to student or to event at any time.

0 - Maximizes Importance of Event; Rejects or Chaatizes Students: regards student's remark or action as "offensive" or improper; Teacher eventually reprimands, rebukes, scolds, threatens, moralizes, criticizes or punishes participant(s).

ITEM 2

2 - Utilizes Event to Benefit Students: Teacher does not regard student's remark or action as "offensive," but as humorous and/or as informative; remark or action is incorporated into on-going lesson as point of reference, example, explanation, etc.

1 - Minimizes Event; Ignores or Responds Non-evaluatively: Teacher either ignores the remark entirely or else makes minimum, non-hostile response.

0 - Maximizes Importance of Event; Rejects or Chastizes Students: Teacher regards student's remark or action as offensive, improper or unwise; responds pompously, moralistically and/or rebukes, criticizes, scolds, reprimands, etc.

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 3

2 - Utilizes Event by Acceptance: Teacher concurs with students or answers courteously and sincerely in effort to enlist students' help, to make inquiries or to work out an amicable solution (Complete absence of threat or constraint).

1 - Minimizes Event: Ignores or Responds Non-Evaluatively: Teacher either ignores the remark or event entirely, or offers minimu, non-hostile response or comment.

0 - Maximizes Import of Event; Rejects Students; Self-defensive: Teacher regards student's remark or action as offensive, improper or unwise; responds pompously, moralistically, defends position with moralistic lecture, generalities, political analogies; rebukes, criticizes, scolds, threatens, reprimands, etc.

ITEM 4

2 - Utilizes Event to Benefit Students: Teacher's remarks designed to instruct or to inform students; remarks or event used by teacher to help students learn about individual differences, preferences, etc.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher either ignores the remark or event entirely, or offers minimum, non-hostile response or comment.

0 - Maximizes Import of Event; Rejects or Chastizes Students: Teacher irritated or annoyed by remark or event; rebukes, reprimands, emphasizes her authority as teacher, etc.

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 5

2 - Utilizes Event to Benefit Student or Class: Teacher not irritated or offended but regards remark or action as informative, revealing or relevant to class; remark or action of student is incorporated into on-going lesson as point of reference, example, motivational clue, etc.

1 - Minimizes Event; Ignores or Responds Non-evaluatively: Teacher does not regard situation or remarks as significant; virtually ignores aggressive component or disruptive nature of act; simply inquires into student's motives.

0 - Maximizes Import of Event; Rejects or Chastizes Students: Teacher regards student's remark or action as offensive, improper or unwise; eventually reprimands, rebukes, scolds, threatens, moralizes, criticizes or punishes participant(s).

ITEM 6

2 - Utilizes Event to Benefit Student or Class: Teacher not irritated or offended but regards remark or action as informative, revealing or relevant to student or class; student's remark or action is interpreted, applied or utilized in an effective, profitable manner.

1 - Minimizes Event: Ignores or Responds Non-Evaluatively: Teacher does not regard act as defiant or as a transgression; no issue is raised nor is punishment given; teacher seeks more information; asks pupil his reason for failing to comply.

0 - Maximizes Import of Event; Rejects or Chastizes Students: Teacher regards student's remark or action as offensive, improper or unwise; eventually reprimands, rebukes, scolds, moralizes or punishes.

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 7

2 - Utilizes Event to Benefit Students: Teacher does not regard pupil's remark or action as "offensive," but as humorous and/or as informative; remark or action is incorperated into on-going lesson as point of references, example, explanation, etc.

1 - Minimizes Event; Ignores or Responds Non-evaluatively: Teacher ignores remark or event completely; no response to student or to event at any time.

2 - Maximizes Importance of Event; Rejects or Chastizes Students: Regards student's remark or action as "offensive" or improper; teacher eventually reprimands, rebukes, scolds, threatens, moralizes, criticizes or punishes participant(s).

ITEM 8

2 - Utilizes Event to Benefit Student or Class: Teacher not irritated or offended, but regards remark or action asinformative, revealing or helpful; event is incorporated into on-going lesson as point of reference, example, motivational clue, etc.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher does not regard situation as unduly significant or important; largely ignores event, or simply calls for participants to desist; may seek more information in effort to determine ownership; calls for discussion later with participants to resolve ownership.

0 - Maximizes Import of Event; Rejects or Chastizes Student(s): Event is regarded as especially significant--an issue too great to be resolved in classroom, but will require information from, or the presence of, parents or other authority figures; one or both of the participants is threatened, scolded, rebunked, reprimanded or punished.

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 9

2 - Utilizes Event to Benefit Student or Class: Teacher not irritated or offended of regards remark or action as informative, revealing or relevant to student or class; student's remark or action is interpreted, applied or utilized in an effective, profitable manner.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher does not regard act as defiant or as a transgression; no issue is raised nor is punishment given; teacher seeks more information; asks pupil his reasons for failing to comply.

0 - Maximizes Import of Event; Rejects or Chastizes Students: Teacher regards student's remark or action as offensive, improper or unwise; eventually reprimands, rebukes, scolds, moralizes or punishes.

ITEM 10

2 - Utilizes Event to Benefit Student or Class: Gentle and supportive effort by teacher to bring out pupil; no attempt by teacher to force, coerce or push pupil to respond.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher passes over, ignores or deals with at a later time.

0 - Maximizes Import of Event; Rejects or Chastizes Students: Regards student's remark or action as "offensive" or improper; teacher eventually reprimands, rebukes, scolds, threatens, moralizes, criticises or punishes participant(s).

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 11

2 - Utilizes Event to Benefit Student or Class; Teacher not irritated or offended but regards remark or action as informative, revealing or relevant to student or class; student's behavior is interpreted supportively, or utilized to his benefit or that of the class.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher's principal action is to obtain more information regarding pupil's behavior; act is not automatically regarded as defiance nor is an issue made out of it.

0 - Maximizes Import of Event; Rejects or Chastizes Student: Event is regarded as especially significant--an issue of importance that will require information from, or the presence of, parents or other authority (figures; the student is scolded, rebuked, reprimanded, punished or threatened, etc.

ITEM 12

2 - Utilizes Event to Benefit Student or Class: Teacher not irritated or offended, but regards remark or action as informative, revealing or helpful; event in incorporated into on-going lesson as point of reference, example, motivational clue, etc.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher does not regard situation as unduly significant or important; largely ignores event, or simply calls for participants to desist or encourages participants to resolve event by themselves; teacher's immediate reaction is to obtain more information.

0 - Maximizes Import of Event; Rejects or Chastizes Student(s): Event is especially significant--an issue important enough to require teacher to act immediately as judge, moderator or arbiter (in or out of classroom); teacher regards the language and/or behavior as offensive, improper or unwise; teacher scolds, threatens, criticizes, reprimands, punishes, etc.

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 13

2 - Utilizes Event to Benefit Student or Class: Pupil's reaction incorporated by teacher into on-going lesson; no rebuke or criticism given.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher virtually ignores pupil's behavior unless to provide him with brief cautionary statement; does not require pupil to desist in examination of object.

0 - Maximizes Importance of Event; Rejects or Chastizes Students: Regards student's remark or action as offensive or unwise; teacher eventually reprimands, rebukes, scolds, threatens, moralizes, criticizes or punishes participant and pupil is coerced into returning object of interest.

ITEM 14

2 - Utilizes Event to Benefit Student or Class: Teacher uses pupil's remark and/or action constructively--event is incorporated into lesson, applied as a lesson in life, learning experience, release of tension, etc.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher does not regard situation as especially significant; virtually ignores aggressive component or disruptive nature; simply calls for participants to desist and/or to resolve later by themselves or with teacher's help.

0 - Maximizes Importance of Event; Rejects or Chastizes Students: Regards student's remark or action as "offensive" or improper; teacher eventually reprimands, rebukes, scolds, threatens, moralizes, criticizes or punishes participant(s).

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

ITEM 15

2 - Utilizes Event to Benefit Student or Class: Teacher not irritated or offended but regards remark or action as informative, revealing or relevant to student or class; student's behavior is interpreted supportively, or utilized to his benefit or that of the class.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher does not regard act as defiant or as a transgression; no issue is raised nor is punishment given: teacher seeks more information; asks pupil his reason for failing to comply.

0 - Maximizes Import of Event; Rejects or Chastizes Student: Teacher regards student's remark or action as offensive, improper or unwise; eventually reprimands, rebukes, scolds, moralizes or punishes.

ITEM 16

2 - Utilizes Event to Benefit Student or Class: Teacher uses pupil's remark and/or action constructively; teacher not irritated or offended, nor accepts remark at face value, but rather attempts to enlist pupil's cooperation through supportive actions designed to motivate, distract, etc.; no rebuke or criticism given.

1 - Minimizes Event; Ignores or Responds Non-Evaluatively: Teacher does not regard situation as especially significant; virtually ignores aggressive or defiant component; simply accepts pupil's intention without rebuke or punishment.

0 - Maximizes Importance of Event; Rejects or Chastizes Students: Regards student's remark or action as "offensive" or improper; teacher eventually reprimands, rebukes, restrains, scolds, threatens, moralizes, criticizes or punishes participant.

CLASSROOM SITUATIONS: Instructions to Raters (Continued)

LETTER SCALE

Instructions: Refer to this Scale when an item is rated as "0". Insert the appropriate letter on your answer sheet immediately following the 0 (e.g., 0a).

Complete the following statement by choosing one letter: TEACHER'S REBUKE CONTAINS:

a) explicit objection to student's language, but no reference to student's behavior.

b) explicit objection to student's behavior but no reference to student's language.

c) non-explicit (non-labelled), generalized, non-specific objection to overall event (e.g., "Stop that!" "Cut it out." etc.)

x) Does not apply--no teacher rebuke is involved.

SOCIOMETRIC INSTRUMENT

In my class,

I would like to **SPEND TIME WITH:**

(use full name)

1. _____

2. _____

3. _____

4. _____

In my class,

I would like to SIT NEXT TO:

(use full name)

1. _____

2. _____

3. _____

4. _____

In my class,

I would like to WORK WITH:

(use full name)

1. _____

2. _____

3. _____

4. _____

DATA BEARING ON THE SAMPLING PROCEDURES

1. Ethnic Breakdown of Schools

2. Grade Levels

3. Numbers of Years of Teaching Experience

ETHNIC BREAKDOWN OF STINT AND NON-STINT SCHOOLS: BY PAIRS AND OVERALL

	Percentage: Puerto Rican		Percentage: Black		Percentage: Other*	
Pair	STINT	Non-STINT	STINT	Non-STINT	STINT	Non-STINT
1	89.2	840	7.6	4.0	3.8	12.0
2	64.9	64.9	8.1	7.4	27.0	12.7
3	71.4	71.5	16.3	11.4	12.3	17.1
4	66.0	68.6	26.6	29.5	7.4	1.9
5	45.7	43.1	51.3	50.1	2.0	6.8
6	53.8	62.2	44.9	36.2	2.3	1.6
7	38.3	42.0	60.7	55.9	1.0	2.1
Mean	58.8	61.3	34.4	30.6	3.6	8.1

Includes White, Oriental, American Indian, and Non-Puerto Rican Spanish surname.

GRADE LEVELS TAUGHT BY STINT AND NON-STINT TEACHERS (PRIMARY OR INTERMEDIATE) PARTICIPATING IN THE EVALUATION

Grade Taught	STINT	Non-STINT	Percentage STINT	Percentage Non-STINT
Primary	25	27	51.0	56.3
Intermediate	24	21	49.0	43.7
Total	49	48	100.0	100.0

NUMBER OF YEARS OF TEACHING EXPERIENCE: STINT AND NON-STINT TEACHERS PARTICIPATING IN THE EVALUATION

Number of Years Experience	STINT	Non-STINT	% STINT	% Non-STINT
Under 1	25	17	51.0	35.4
1 but under 2	7	14	14.3	29.2
2 but under 3	10	10	20.4	20.8
3 but under 5	7	7	14.3	14.6
Total	49	48	100.0	100.0

RATES OF ABSENTEEISM IN FOUR STINT AND NON-STINT CLASSES VISITED FOR ADMINISTRATION OF THE SOCIOMETRIC INSTRUMENT

	STINT Classes Visited	Non-STINT Classes Visited
Total Number of Students Enrolled in Classes Visited	107	102
Total number of Students Absent in Classes Visited	34	19
Percentage of Absenteeism	31.6	18.6

SCOTT PI COEFFICIENT: AGREEMENT BETWEEN EACH OBSERVER TRAINEE AND THE OBSERVER-TRAINER

Observer	Pi
1	.89
2	.83
3	.82
4	.80
5	.75
6	.75
7	.74
8	.70

Note—An observer is considered reliable if his Scott Pi coefficient with the observer-trainer is equal to or greater than .70. The Scott Pi coefficient represents a percentage of agreement figure exceeding agreement by chance alone.

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MATERIAL ABSTRACTED FROM A NEW PROPOSAL FOR EVALUATING THE "STINT" PROGRAM, REFLECTING PROBLEMS IN COLLECTING DATA IN NEW YORK CITY SCHOOLS

Learning "practical" evaluation procedures for use in New York City schools has largely been a matter of considered judgment combined with trial-and-error. Procedures that were initially felt to be non-threatening and relatively "unobtrusive" in some instances generated unexpected amounts of resistance and anxiety. This occurred in our final round of data collection. In this round, we asked teachers not to identify themselves on the instruments we were using, hoping to remove the potential threat (and, hopefully increase the percentage of returns). However, when the teacher's identities were kept completely anonyomous (as they were in this round), we received one-third to 40% fewer responses than we did when teachers were asked to identify themselves and their schools. From this we concluded that on instruments of this kind, we would, in the future, ask teachers to identify themselves, but make more intensive efforts to convince teachers about the privacy of the data. This is important, as teachers in one of the schools refused to respond to an instrument which asked them to reveal how well they got along with their principal and colleagues. It is clear that without the certainty of the anonymity of such personal data, teachers would be reluctant to respond candidly (or at all) to such items.

Interestingly enough, we discovered that procedures that were expected to generate some resistance actually turned out to be the easiest to deal with. The classroom observations fell into this category. However, our elaborate communication with principals well in advance with the actual observations did not necessarily guarantee cooperation of the office staff in getting the observers to their classrooms (or even guarantee their foreknowledge of upcoming observations). In the future,

more exhaustive communications will be needed. It was also clear that, in all fairness, teachers be given some feedback about the data gathered during the observations. Too often, observers of various kinds march in and out of urban classrooms without giving any form of communication to the teachers, and leave them feeling very much "left out" about what is happening. Thus, if it is possible, some kind of systematic feedback procedure should be built into research designs that utilize classroom observation.

Initially, we had set guidelines for our data-collection of not interrupting classroom procedures. However, in gathering data about children's growth in social adequacy in the classroom, in was necessary to interrupt the ongoing procedures to administer the instrument. Much to our surprise, this was not only tolerated by the teachers, but was enthusiastically received by both them and the children. The children appeared to enjoy taking the sociometric instrument, and the teachers were apparently intrigued by the idea of charting children's social preferences. Because of the enthusiasm and goodwill generated by the data-collection procedures, all participating teachers were promised (and received) feedback about children's social selections in their classrooms. It is strongly believed that by providing teachers with feedback about data-collection procedures in situations that would not invalidate subsequent data-collection, teachers can be made to feel more a part of (and have more positive feelings about) the entire evaluation. In fact, the willingness of teachers and principals to cooperate is (in addition to an appropriate and properly organized and implemented research design) one of the most important components in the success of an evaluation effort. The UFT contract with the New York City schools prohibits incursions into teacher's free time. In addition, it is impractical to consider "buying" teacher's time after regular school hours in order to have them respond to different data-

collection instruments. As a result, their participation is largely dependent upon their willingness to be involved in the evaluation. As for the principals, their desire to avoid confrontations with the union representatives in their schools caused them to be extremely cautious about attempting to impose any extra tasks on their faculties. This year, we discovered that on-site visits to the schools by the project director and the project associate helped to prevent a number of potential human-relations problems.

In all, those of us involved in the STINT evaluation felt that we had acquired invaluable information about the limits to which we could realistically impose data-collection procedures on harrassed teachers and principals in the New York City schools. It is clear that teachers simply will not respond to more than two instruments, and will tolerate only limited kinds of interruptions in their regular classroom routines. We also learned that elaborate advance communication must be initiated with participating teachers and principals, in order to insure a more positive reception for our data-collection personnel on their visits to the schools.

SUPPLEMENT

The Supplement to the project report includes the data about teacher-turnover and student attendance that were not available prior to the preparation of the main report.

I. FINDINGS

Teacher-Turnover

Complete data about teacher-turnover were gathered for all teachers in the original sample following the re-opening of schools in September, 1970. Of the 48 teachers in the original STINT group, 3 left their jobs as a result of voluntary transfer or resignation (approximately 6%). Of the 49 teachers in the original non-STINT group, 8 left their jobs as a result of voluntary transfer or resignation (approximately 16%). This difference was not significant, using chi square analysis and the Yates correction formula ($\chi^2 = 1.86$).

Student Attendance

Percentage of attendance data for the entire school year 1969-70 were collected for each school in the STINT and non-STINT groups in September, 1970. These data are shown in Table XII. The mean percentage of attendance for the STINT group was .87, and for the non-STINT group .84. This difference was not significant, using ANOVA (F = 2.075).

II. DISCUSSION

Teacher-Turnover

The more complete teacher-turnover data gathered at the beginning of the school year 1970-71 show some changes from those gathered in late spring. The difference between the STINT and non-STINT groups in now far less dramatic. The 8-to-1 ratio of non-STINT/STINT resignations or transfers is now reduced to approximately 3-to-1. It is evident, however, that with such small n's (49 and 48, respectively) small numbers of personnal changes (in this case 2 additional STINT teachers leaving their schools) generate misleadingly large apparent changes in the overall picture. (The present data seem to exemplify, to a degree, the inappropriateness of using percentages with n's of less than 100.) Because of the small n's involved, the ideosyndiratic data become more important. This is seen in a dramatic way in the data from District 14, in which none of the approximately 180 STINT teachers left their schools during the school year 1969-70 - a remarkable figure. However, it seems worthwhile to attempt to make overall group-to-group comparisons with larger n's, in order to establish a strong basis for inference-making about

TABLE XII

PERCENTAGE OF ATTENDANCE DATA
FOR EACH OF THE STINT AND
NON-STINT SCHOOLS

Group	Percentage of Attendance: Individual Schools in Group				Group Mean
STINT	.85	.89	.85	.91	.87
	.82	.92	.82		
Non-STINT	.80	.90	.83	.90	.84
	.76	.84	.84		

this important issue. The problem here lies in lack of availability of current teacher-turnover data in the New York City school system. Although it is possible to gather these data for a large, randomly-selected number of teachers in the STINT program (or even the entire program population) normative data about teacher-turnover in New York City public schools are only available for the preceding school year. Thus, a comparison of the STINT teacher-turnover rate to that in the New York City schools in general could not be made for the same school year. The apparent alternative - collecting data about randomly-selected non-STINT teachers from the same schools and grade-levels as the STINT teachers - is inappropriate. Almost invariably, all of the new teachers in schools featuring STINT participate in the program. In addition, the "inexperienced" teachers selected for participation are those deemed by their principal as needing additional help. Thus, there are no teachers in the STINT schools that could be used as a basis of comparison. To select "control" schools that match those participating in the STINT program also leads to disappointment. This was the procedure undertaken initially in this study, which produced only 7 matched pairs of schools from the entire system. A loosening-up of the selection criteria for "control" schools to be used to produce the necessary normative data appears to be the only practical solution to this problems.

Student Attendance

Although they represented the most desirable format for estimating student attendance in the two groups, classroom-by-classroom percentage-of-attendance figures were not available at the time of the supplementary data-collection in September, 1970. The only alternative to delaying the Supplement beyond reasonable time limits was to use total-school figures. These data, are, of course, of limited value, inasmuch as the student attendance figures for the STINT schools include all of the non-STINT classrooms in those schools (which, in fact, constitute a majority of the classrooms). The presence of this large and obvious contaminant calls into serious question the usefulness of school-by-school estimates of student attendance in this study. The only apparent solution to this problem for future data-collection efforts of this kind would be to collect the classroom-by-classroom data in the late spring, in advance of the end of the school year. Although these data would be somewhat incomplete, they would be representative and would be quite adequate for comparison purposes.